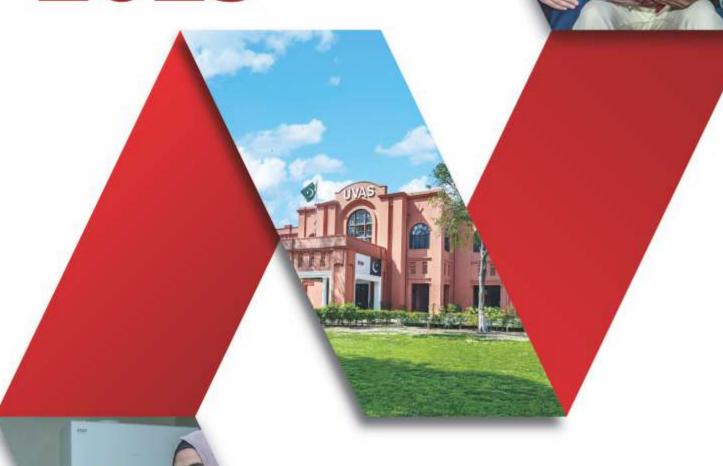


UNDERGRADUATE PROSPECTUS

2023



PROVOKING POTENTIALS,
PRODUCING PROFESSIONALS

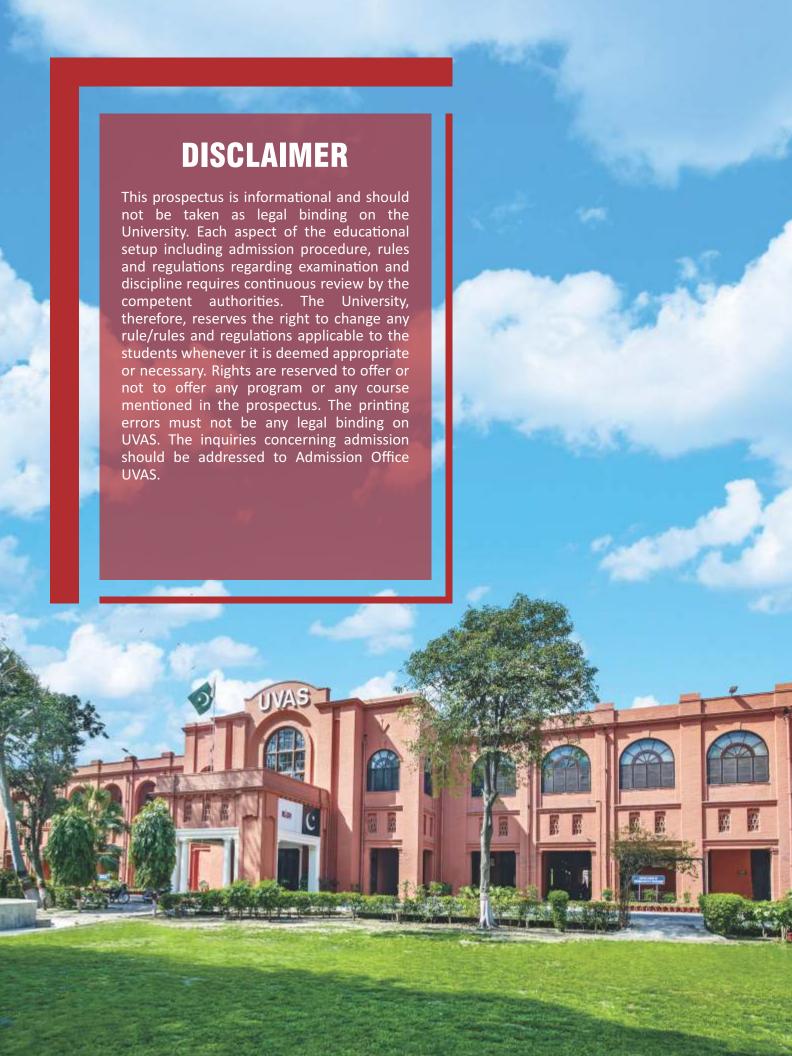
UNIVERSITY OF VETERINARY AND ANIMAL SCIENCES, LAHORE, PAKISTAN



UNITY, FAITH, DISCIPLINE

Father of Nation

You must concentrate on gaining knowledge and education. It is your foremost responsibility. Political awareness of the era is also part of your education. You must be aware of international events and environment. Education is a matter of life and death for our country. I insist you to strive. Work, work and only for satisfaction work patience, humbleness and serve the Nation.



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VICE CHANCELLOR'S MESSAGE

Dear Prospective Students

The University of Veterinary & Animal Sciences, Lahore is one of the oldest Veterinary Institutions in Asia, having 140 glorious years of historical legacy. According to the recent Times Higher Education (THE) World University Impact Rankings, UVAS is ranked top amongst 23 competing Pakistani Universities. Whereas according to QS ranking, UVAS is amongst the top most Asian Universities. According to HEC ranking, UVAS is ranked 3rd best in sports among Public Sector Universities. As per the latest assessment of the Quality Assurance Agency of HEC, UVAS has achieved highest "W" category.

During COVID-19 period UVAS become the leading University in online teaching and examination system. UVAS is helping the Health Department of Govt. of Punjab by conducting testing facility for COVID-19 parents through its newly established BSL-3 Laboratory. UVAS initiated Veterinary Telemedicine for the valued clients. It also provided awareness campaign through series of short video messages/seminars available on YouTube. This institution has five campuses, including City Campus Lahore, Ravi Campus Pattoki, CVAS Jhang, KBCMACVAS Narowal and Para Veterinary Institute at district Layyah. Besides that, there is one Avian Research and Training Center Ferozepur Road, Lahore. There are two (02) affiliated institutes situated at Lahore and Sahiwal.

The university has five faculties offering 98 professional degrees, including 16 undergraduate, 33 M. Phil and 23 Ph.D. degree programs. Currently 997 M.Phil. and 314 Ph.D students are enrolled in various disciplines. UVAS has awarded degrees to 370 Ph. D and 3856 M.Phil. and 8397 undergraduate students up till now.

This institution has 376 faculty members among them 247 are Ph. D in their fields of specialization. Recently, university faculty has published 575 research papers in HEC recognized and impact factor journals. There are one hundred Twenty One (121) ongoing Research Projects of worth Rs.1.339 Billion funded by various national and international funding agencies. UVAS has developed 64 international and 113 national linkages with academia and industries.

UVAS has developed state of the art clinics, teaching, training, research and diagnostic facilities. The role and contribution of this institution in imparting quality education and conducting high standard research in the field of Livestock, Poultry, Fisheries, Wildlife, Pharmaceutics, Business Management, and Biological sciences in general are now well recognized nationally and internationally.

UVAS is highly privileged on the diversity of its students' background and geographical association. UVAS students on one hand demonstrate academic excellence while on the other hand they are actively engaged in co-curricular and extra-curricular activities. Many of the UVAS students engage in social welfare, community development and innovative services through clubs and societies run by students themselves and patronized by faculty members. These clubs and societies have put in extra-ordinary efforts to prove their social responsibility and provide opportunities for the students to polish their skills and divulge hidden talent. Our students and staff have extended their social services to wide ranging activities like COVID-19 testing in BSL-3 lab, flood relief, awareness campaigns, animal welfare, civic engagement, community development etc.

In this background, I welcome you as a prospective student in this university. Programs launched by this University require hard work, commitment and require you to stay on the campus and at your experimental stations for long working hours. The University makes all arrangements to provide a conducive environment for study and research. As you have to take up responsibility in the society at a later stage as a scientific leader of the nation, you need to be well prepared for it.

I assure you, that, if you work honestly and devotedly to improve your knowledge and professional skills, the University faculty shall provide you all support towards accomplishment of your research in the most useful manner. I wish you a very fruitful stay at UVAS during your graduate studies with the hope that you will rise as a distinct star in the realm of your profession.

Prof. Dr. Nasim Ahmad, (S.I., DNP)
Vice Chancellor





VISION & MISSION

Provoking Potentials Producing Professionals

Vision:

The university aspires to be the nation's leading public sector university with global recognition due to its quality in teaching, research, civic engagement, and economic development.

Mission:

We develop human resources through professional education, research and training in the field of life sciences. The university promotes learning environment that cherishes gender, the cultural equity and supports pursuit of knowledge, academic freedom and intellectual curiosity. We aim at socio-economic growth of the country by ensuring professional excellence, integrity and ethical conduct in our graduates with diverse and innovative faculty.



History of Education at UVAS

The University of Veterinary & Animal Sciences, Lahore is one of the oldest Veterinary Institutions in Aisa. Since its inception in 1882, this institution has worked enthusiastically and conducted a wide range of programs that have effectively catered to the educational and training needs in the field of Veterinary and Animal Sciences. By now, it has emerged as one of the renowned centers of teaching in Veterinary Education in Aisa.

The up-gradation of College of Veterinary Sciences, Lahore in 2002, to the status of University is considered as a milestone to upgrade veterinary education and research in the country. This a wide range of relevant degree program, trainings and research projects were initiated.

So far about 8500 graduates who have qualified from this institution are serving all over the world. Many graduates from this institution have risen to the position/rank of Major General in Pakistan

Army, Ministers of Government, Vice Chancellors of Universities and Federal/Provincial Secretaries. Our alumni are also on the faculty of academic institutions within the country and abroad. They are also on the staff of national and international research institutions, UN Agencies (FAO, UNDP, WHO) and Pakistan Atomic Energy Commission, etc. Numerous graduates have ventured as entrepreneurs in the livestock and poultry industries embracing great success.

UVAS provides ample opportunities to the students to discover themselves, realize their true potential and prepare them for the future challenges. In view of the emerging highly significant role of education in National Economy. The UVAS has initiated many new degree programs to provide required human resource for the development activities of Pakistan.

You are probably already aware that UVAS is one of leading universities in Pakistan in terms of its academic reputation, but did you know:



EMERGING	Among 351-400 in The Higher Education (THE) Emerging Economies Universities Ranking 2021
1 st	Among 23 Pakistani University The Higher Education (THE) Impact Ranking 2020
TOP-10	Among Top-10 in General Universities of Pakistan. (HEC Ranking-2015 & 2016)
QS	Among Top-401-500 Asian Universities (QS World University Rankings 2020)
5 th	Among Top-5 in General Universities Among Top 3 in Public Sector Universities (HEC Sports Ranking-2018)
2 nd	2nd Best University in Agriculture / Veterinary Category
175+	Ph.D Faculty Members
ISO	Certified University Diagnostic and Research Labs
W	Category (QEC Ranking by HEC Pakistan)
141 yrs	Glorious Years of Professional Legacy
1st	To Establish Drug & Poison Information Centre in Pakistan
24/7	Offers 24/7 Extension Services to Farmers

- Degrees approved & accredited by HEC & Respective Councils
- Pioneer in offering programs in Dairy Technology, Fisheries, Wildlife, Poultry Sciences & Life Sciences Business Management Programs in Pakistan



Degree Programs	Approved Eligibility Criteria	Age Limit & Weightage
Doctor of Veterinary Medicine (DVM) Doctor of Pharmacy (Pharm-D) BS Human Nutrition & Dietetics	 At least 60% marks (excluding Hafiz-e-Quran) in F.Sc. (Pre-Medical) or an equivalent examination from recognized institution / Board. 20 marks for Hafiz-e-Quran will be awarded subject to clearance of test. Candidates must bring their original documents on the day of test. The final merit will be based on marks obtained in Matric / O-Level or any other equivalent examination and F.Sc. / A-Level or any other equivalent examination. 	Candidate must not be over 23 years of age on the last date of submission of application. Weightage: Intermediate / Equivalent (70%) Matric (30%)
BS Applied Microbiology BS Biotechnology BS Biochemistry BS Food Science and Technology BS Medical Laboratory Technology BS Zoology BS Poultry Science BS Biological Sciences BS Botany BS Fisheries and Aquaculture	At least 50% marks (excluding Hafiz-e-Quran) in F.Sc. (Pre-Medical) or an equivalent examination from recognized institution / Board. 20 marks for Hafiz-e-Quran will be awarded subject to clearance of test. Candidates must bring their original documents on day of test. The final merit will be based on marks obtained in Matric / O-Level or any other equivalent examination and F.Sc. / A-Level or any other equivalent examination	
BS Environmental Sciences BS Dairy Technology	At least 50% marks (excluding Hafiz-e-Quran) in F.Sc. (Pre-Medical / Pre-Engineering) or an equivalent examination from recognized institution / Board. 20 marks for Hafiz-e-Quran will be awarded subject to clearance of test. Candidates must bring their original documents on day of test. The final merit will be based on marks obtained in Matric / O-Level or any other equivalent examination and F.Sc. / A-Level or any other equivalent examination	
BBA	At least 50% marks (excluding Hafiz-e-Quran) in F.Sc. (Pre-Medical / Pre-Engineering) / FA / ICS / I.Com. or an equivalent examination from recognized institution / Board. 20 marks for Hafiz-e-Quran will be awarded subject to clearance of test. Candidates must bring their original documents on day of test. The final merit will be based on marks obtained in Matric / O-Level or any other equivalent examination and F.Sc. / A-Level or any other equivalent examination	

Undergraduate Programs at Various Campuses

Degree Programs, Lahore Campus

Doctor of Veterinary Medicine (DVM) (M/E*) (Lahore/Ravi Campus, Pattoki)

Doctor of Pharmacy (Pharm-D) (M/E*) (Lahore Campus)

BS Applied Microbiology (M/E*)

BS Human Nutrition & Dietetics (M/E*)

BS Biotechnology (M/E*)

BS Biochemistry (M/E*)

BS Food Science and Technology (M/E*)

BS Biological Sciences (M/E*)

BS Medical Laboratory Technology (M/E*)

BS Environmental Sciences (M/E*)

BBA - Bachelor of Business Administration (M/E*)

Degree Programs, Ravi Campus, Pattoki

BS Poultry Science (M*)

BS Zoology (M*)

BS Fisheries and Aquaculture (M*)

BS Biological Sciences (M*)

BS Medical Laboratory Technology (M*)

BS Botany (M*)

BS Dairy Technology (M*)

Degree Programs, Jhang Campus

Doctor of Veterinary Medicine (DVM) (M/E*) (Jhang Campus)

BS Applied Microbiology (M/E*)

BS Biological Sciences (M*)

BS Zoology (M*)

Degree Programs, Narowal Campus

Doctor of Veterinary Medicine (DVM) (M/E*) (Narowal Campus)

BS Medical Laboratory Technology (M*)

BS Applied Microbiology (M/E*)



Important Instructions

All Degree Programs
are following latest
Undergraduate Education
Policy 2023 given by
HEC Pakistan

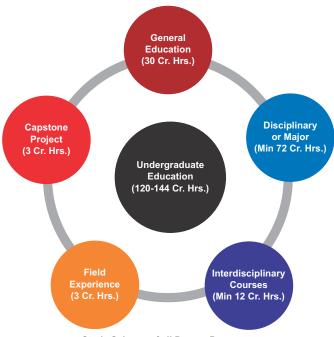
A candidate can give choices of all disciplines in order of priority. However, it is advised to avoid giving unnecessary choices of disciplines which may not be acceptable to the student afterwards.

Preferences

- Merit will be determined according to the given preferences of disciplines and their order of priority.
- Starting with the first preference, applicants will be assessed and ranked according to the merit for each discipline. A computerized matching process will place the applicants (meeting the minimum merit requirements) to the highest listed in his/ her preference.
- Once offered a place to the highest listed preference, an applicant cannot claim admission to the discipline named lower in his / her preference.
- An applicant, under no circumstances, shall be considered for any discipline, he/she has not given in his/her order of preferences. The Admission Committee shall not assign any discipline by itself if the alternate choices are not indicated.
- In case the applicant has applied on disable quota. He / She must submit/upload the disability certificate duly attested by concerned competent authority. Otherwise, the application will not be entertained in any case.

Instructions for O/A/GCE Students

Candidates possessing O-Level / A-Level or any foreign equivalent qualifications must have to submit the equivalence certificate from Inter Board Committee of Chairmen (IBCC) Islamabad – Pakistan prior to last date to submission of application to determine the final merit. (http://www.ibcc.edu.pk).



Study Scheme of all Degree Programs



STEPS FOR ADMISSION

- 1. Prospectus can be downloaded from the University Website, www.uvas.edu.pk.
- 2. Application will be filled and submitted online at University Website.
- 3. Candidate will pay an amount of Rs. 1500-/ as Admission Processing Fee (only for one choice). The candidates applying for more than one discipline will have to pay Rs. 500/- for each additional choice. If the application is to be submitted against any quota, then the candidate has to pay additional fee of Rs.300/-.
- 4. Candidates can deposit the application fee through online generated Bank Challan in any branch of Bank Alfalah Ltd. in Pakistan.
- Candidates are advised to fill the Application Admission Form carefully after reading the instructions and especially the column for preferences of different disciplines.
- Students applying for admissions shall give an order of preference for Morning and Evening programs separately offered at each campus. The order of preferences once given by the candidate in the application shall be final and cannot be changed subsequently.
- 7. If a candidate has applied domain of morning and evening programs separately, then he/she will compete separately for these domains.
- 8. Incomplete applications will NOT be accepted.
- 9. In case of occurrence of vacant seat, the candidate will be upgraded automatically in subsequent lists to a degree program listed higher in his/her order of preference.
- 10. The tentative master merit list of all applicants along with their marks will be displayed on UVAS website after the closure of the admission to ensure transparency and for error if any. The applicant may apply within 48 hours by Email (ugadmission23@uvas.edu.pk) if there is any discrepancy in the tentative master list. Afterwards, no claim will be entertained.
- 11. The final master list will be displayed after omitting the errors (if any).
- 12. The selection of the candidates shall be made purely on merit basis. List of admitted students will be displayed on the website www.uvas.edu.pk, and on Notice Boards of the office of Convener of the Admission Committee, UVAS, Lahore on the date mentioned in the admission advertisement in the National Press or website.
- 13. Candidates shall NOT be informed about their selection individually, so they will have to check their status of admission from the lists of selected candidates displayed on notice Board or on webpage.
- 14. If any candidate fails to deposit the University dues within the stipulated period after the display of admission lists, his/her admission shall stand cancelled automatically without any prior notice and the admission on that seat will be offered to next waiting candidate on merit basis.
- 15. If any discrepancy/false information/facts being found, applicant shall be responsible, and university has the right to cancel/reject his application.
- 16. In case of less than 15 students in any program (Morning/Evening), admission in that discipline will be suspended and students will be offered admission in other disciplines based on his/her preference without any change in merit.
- 17. Limited Hostel facility is available purely on merit places.
- 18. The Candidate can update his/her already uploaded data, except Quota and the degree program in which he/she already applied, after deposit of challan

GUIDELINES FOR FOREIGN STUDENTS FOR ADMISSION AT UVAS, LAHORE

This scheme aims to assist foreign students with educational aspirations in Pakistan. A limited number of seats at University of Veterinary and Animal Sciences, Lahore have been allocated in session 2022 for foreign citizens with an HSSC or equivalent degree.

ELIGIBILITY CRITERIA

*As per UVAS Approved Policy

- The applicant must hold a foreign nationality (Foreign Passport Holder) at the time of application and admission.
- The applicant must have passed higher secondary school (12th Grade) or the equivalent and with the following combination of subjects; or subjects according to the requirements of degree.
 - a). Physics, Chemistry, Biology for Pre-Medical
 - b). Physics, Chemistry, Mathematics for Pre-Engineering
- 3. Selection of the students against the seats allocated to international students will be made purely on merit to be determined by UVAS, Lahore.

Note:

Medium of instruction at UVAS is English. Hence it is mandatory for international student to submit an undertaking that he / she can read / write / speak English language.

HOW TO APPLY

Foreign nationals may submit their applications online at the following website www.uvas.edu.pk

Last date for submission of application form against advertised seats at University of Veterinary and Animal Sciences, Lahore is as per admission schedule.

For further details please visit www.uvas.edu.pk

Contact Person
Prof. Dr. Wasim Shehzad
Focal Person for Foreign Students
wasim.shehzad@uvas.edu.pk

FACULTY OF VETERINARY SCIENCE (FVS)

Doctor of Veterinary Medicine (DVM), BS Applied Microbiology, BS Medical Laboratory Technology

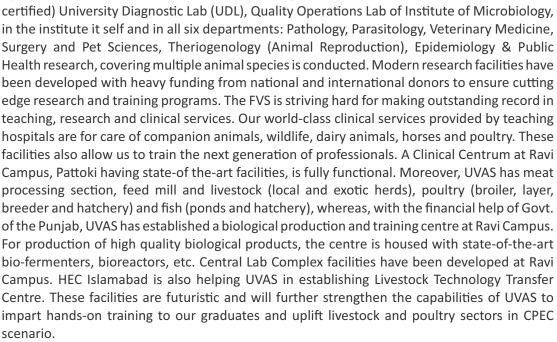


Dean's Message

From the core of my heart, I welcome and appreciate the candidate students of discipline of veterinary science, applied microbiology and medical laboratory technology. This institution has a long history of over 138 years. It rose from a Veterinary School to a College and ultimately to a faculty of the University in 2002. We are serving the livestock, poultry, all other relevant industries, labs, and research institutions with cooperation of Government of the Punjab and meeting technical and scientific requirements of Pakistan in areas of veterinary and microbiology education and research. Our undergraduate students come from all provinces of Pakistan and even from neighboring countries.

We are proud of the outstanding achievements by our under graduates and postgraduates who are bringing recognitions to themselves and Faculty of Veterinary Science (FVS), UVAS, both at national and international levels. The FVS is a Regular Member of AAVS. Our Faculty is also a hub of globally recognized research programs.

Applied Research is conducted in internationally accredited (ISO 17025

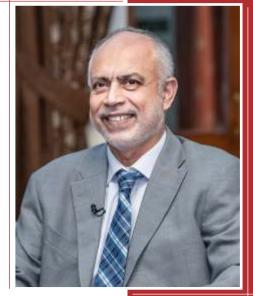


We are dedicated to train our graduates with latest technologies who are career-ready and skilled in establishing business or clinical practice for their success in professional life. For more excellence and improvement in veterinary education, we are following multipronged strategies: 1) Implemented a recently developed national curriculum which has been compliant with evolving local societal and global needs as per OIE/ World Organization for Animal Health, Day 1 Veterinary Graduates core competencies promoting One Health, bio-risk management and animal welfare 2) Changed admission policy for DVM admission attracting more focused students, 3) Interacting more with students during their studies and 4) sharing educational resources to reduce the intellectual learning period. We are quite confident that with these interventions our graduates would continue to emerge as professional leaders.

Thank you for taking interest in our DVM, BS Applied Microbiology and MLT degree programs. Please feel free to contact me or my staff in case of any query.

Prof. Dr. Nasim Ahmad, (S.I., DNP)

Dean, FVS



FACULTY OF VETERINARY SCIENCE

DEPARTMENT OF VETERINARY MEDICINE

Chairperson / Associate Professor

Dr. Jawaria Ali Khan, Ph.D.

Professors

Prof. Dr. Aneela Zameer Durrani, Ph.D. (Tenured) Post Doc

Prof. Dr. Muhammad Hassan Saleem, Ph.D.

Prof. Dr. Muhammad Ijaz, Ph.D. (Tenured) Post Doc

Prof. Dr. Muhammad Avais, Ph.D. (Tenured)

Lecturers

Dr. Zahid Iqbal, Ph.D.

Mr. Arslan Ahmed, M. Phil

DEPARTMENT OF THERIOGENOLOGY

Chairman / Associate Professor

Dr. Muhammad Irfan-ur-Rehman Khan, Ph.D. (Tenured)

Professors

Professor Emeritus Dr. Nasim Ahmad, (SI), Ph.D.

Prof. Dr. Amjad Riaz, Ph.D. (Tenured)

Associate Professor

Dr. Muhammad Zahid Tahir, Ph.D. (Tenured)

Assistant Professors

Dr. Aijaz Ali Channa, Ph.D.

Lecturers

Mr. Muhammad Usman Mehmood, M.Phil (On study leave)

Dr. Ali Husnain, Ph.D.

Dr. Abdul Rehman, Ph.D.

Mr. Usman Arshad, M.Phil (EOL)

Mr. Muhammad Yaseen, M.Phil

DEPARTMENT OF PARASITOLOGY

Chairman / Professor

Prof. Dr. Kamran Ashraf, Ph.D.

Professor

Prof. Dr. Muhammad Imran Rashid, Ph.D.

Prof. Dr. Mian Abdul Hafeez, Ph.D, Post Doc (Tenured)

Prof. Dr. Haroon Akbar, Ph.D. (Tenured)

Associate Professors

Dr. Muhammad Lateef, Ph.D.

Dr. Nisar Ahmad, Ph.D. (on leave)

Assistant Professor

Dr. Muhammad Oneeb, Ph.D.

Adjunct Professor

Prof. Dr. Farkhanda Manzoor, Ph.D., Post Doc

DEPARTMENT OF PATHOLOGY

Chairman / Professor

Prof. Dr. Asim Aslam, Ph.D., Post Doc

Professor

Prof. Dr. Muhammad Yasin Tipu Malik, Ph.D.

Prof. Dr. Muti-ur- Rehman, Ph.D. (Tenured)

Prof. Dr. Raheela Akhtar, Ph.D. (Tenured)

Associate Professors

Dr. Gulbeena Saleem, Ph.D.

Assistant Professors

Dr. M. Saeed Imran, Ph.D.

Dr. Hafiza Qamar-un-Nisa, Ph.D.

Lecturers

Dr. Ghulam Mustafa, Ph.D.

Mr. Adeem Rehman Raffie, M.Phil

INSTITUTE OF MICROBIOLOGY (IOM)

Director

Prof. Dr. Aftab Ahmad Anjum, Ph.D. (Tenured)

Professors

Prof. Emeritus Dr. Masood Rabbani, (IF) Ph.D.

Prof. Emeritus Dr. Tahir Yaqub, Ph.D., Post Doc

Prof. Dr. Aamir Ghafoor, Ph.D.

Prof. Dr. Ali Ahmad Sheikh, Ph.D. (Tenured)

Prof. Dr. Arfan Ahmad, Ph.D. (Tenured)

Prof. Dr. Muhammad Nawaz, Ph.D. (Tenured)

Prof. Dr. Muhammad Zubair Shabbir, Ph.D. (Tenured)

Associate Professors

Dr. Imran Altaf, Ph.D.

Dr. Mateen Abbas, Ph.D.

Dr. Fareeha Akhtar, Ph.D.

Dr. Muhammad Asad Ali, Ph.D

Assistant Professors

Dr. Shahan Azeem, Ph.D.

Dr. Rabia Tanvir, Ph.D. (TTS)

Dr. Sohail Raza, Ph.D. (TTS)

Dr. M. Abu Bakar Shabbir, Ph.D. (TTS)

Dr. Noreen Sarwar, Ph.D. (TTS)

Dr. M. Adnan Ashraf, Ph.D (TTS)

Dr. Muhammad Suleman, Ph.D. (TTS)

Dr. Nadia Mukhtar, Ph.D (TTS)

Lecturers

Dr. Muhammad Imran Najeeb, Ph.D.

Dr. Hassaan Bin Aslam, Ph.D.

Dr. M. Illyas Riaz, Ph.D.

Dr. Saba Sana, Ph.D

Ms. Noor-Ul-Hudda, M.Phil

Dr. Abdul Muqeet Khan, Ph.D.

Hafiz Muhammad Khalid Mahmood, M.Phil

DEPARTMENT OF EPIDEMIOLOGY & PUBLIC HEALTH

Chairman / Professor

Prof. Dr. M. Hassan Mushtaq, Ph.D. (Tenured)

Professor

Prof. Dr. Mamoona Chaudhry, Ph.D.

Associate Professors

Dr. Abdul Rehman, Ph.D. (TTS) (EOL)

Dr. Shakera Sadiq, Ph.D.

Lecturer

Dr. Furqan Awan, Ph.D.

Mr. Ubaid-ur-Rehman Zia, M.Phil Lecturer (On Study Leave)

DEPARTMENT OF VETERINARY SURGERY

Chairman / Associate Professor

Dr. Hamad Bin Rashid, Ph.D.

Associate Professor

Dr. Ayesha Safdar Ch., Ph.D.

Assistant Professors

Dr. Sadaf Aslam, Ph.D. (TTS)

Dr. Hamid Akbar, Ph.D.

Lecturers

Mr. Naveed Hussain, Ph.D. (Scholar)

Dr. Kashif Maan, Ph.D.

DEPARTMENT OF SMALL ANIMALS CLINICAL SCIENCES

Chairman / Professor

Prof. Dr. Asim Khalid Mahmood, Ph.D.

Associate Professors

Dr. Uzma Fareed Durrani, Ph.D. (TTS)

Dr. Shehla Gul Bukhari, Ph.D (TTS)

Lecturers

Mr. M. Zia Ullah, Ph.D. (Scholar)

Mr. Khizar Matloob, M.Phil (EOL)

Mr. M. Afan Shahid, M.Phil (on study leave)

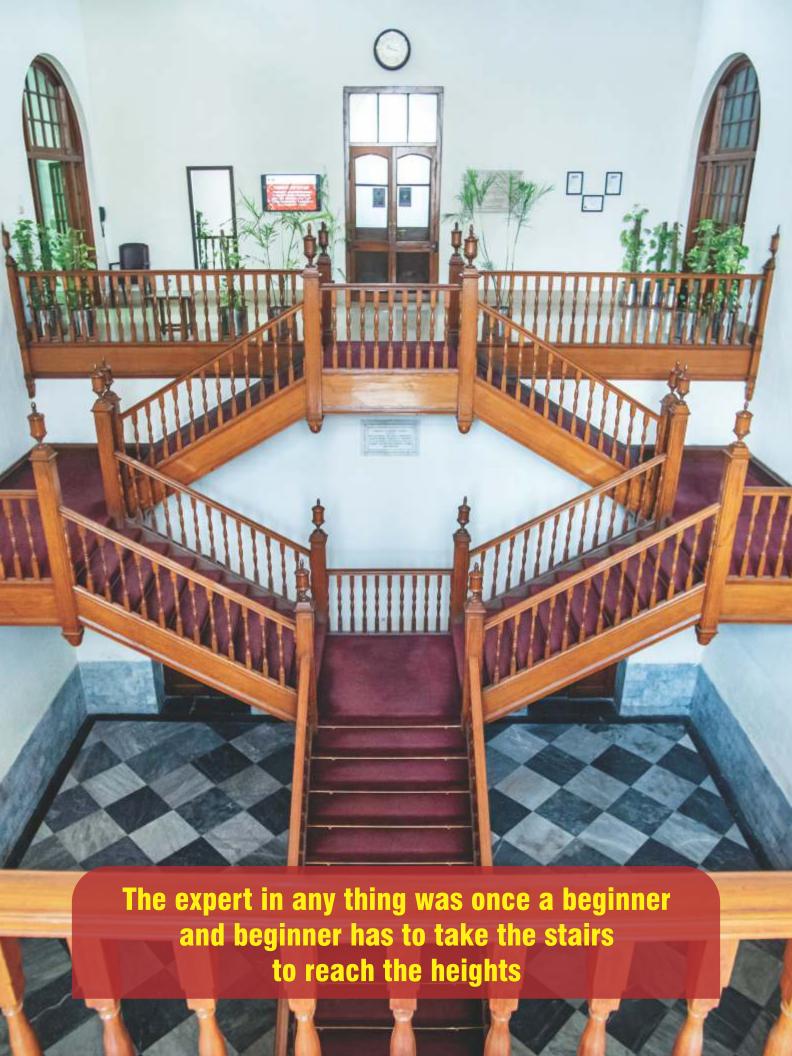
Dr. Muhammad Waqas, Ph.D.

Syed Muhammad Faheem Ahmed, Ph.D. (Scholar)

Mr. Muhammad Awais, Ph.D. (Scholar)

Mr. Zain Khalid, M.Phil

Mr. Muhammad Imran, Ph.D. Scholar.





Veterinary Teaching, Research & Clinical Facilities:

This Animal hospital is the oldest clinical hospital of Asia established in 1882. With the establishment of UVAS in 2002, the dog hospital has been upgraded as Pet centre. The centre has been provided with the latest equipment like electric Cautery, Portable X-ray unit, Hydraulic table, Cardiac Monitor, Infusion Pump, Ultrasound machine, Ultrasonic dental scalar for the diagnosis and treatment of various ailments in pets. All types of medicinal cases and soft tissue and hard tissue surgeries are performed. Pet animals are admitted in well aerated rooms where the patients are looked after for 24 hours by animal physicians and surgeons. Well established clinics for large animals are also available at city campus i.e. outdoor hospital, surgery clinic, reproduction clinic and outreach clinic. Two large animal clinics and one pet training centre are established at Ravi Campus, Pattoki for practical training of students. Hundreds of diseased animals are treated every day at these hospitals. The University has a postmortem block which is fully equipped with advanced units i.e. Hydraulic table, Audio Visual Facilities, Incinerator, Cold Rooms, Freezer, Histopathology Lab. and Lecture room. These are among the best teaching facilities with unique training opportunities in the country.

University Diagnostic Laboratory (UDL) (Accredited Lab ISO/IEC 17025)

University Diagnostic Lab (UDL) is serving the country with a vision to enhance the economic strength by encouraging healthy poultry and livestock sectors. The lab aims to improve the life quality of companion animals, enhancing the safety of animals, protecting wildlife resources through disease diagnostics & control and promotion of awareness towards understanding of animal diseases.

Quality Operations Lab (QOL) (Accredited Lab ISO/IEC 17025)

This is one of the advanced quality testing laboratory with state-of-the-art facilities developed at the university. Quality Operations Laboratory tests the quality of foods of animal and plant origin, not only to meet the requirements of international trade but also to help local market & needs of the country. Testing of mycotoxins, drug residues, pesticides, insecticides etc in the food is done. The lab also sells a kit for testing milk adulterants. Students of the university also conduct their research in this lab.

Pet Centre

Pet Centre is one of the oldest Teaching Hospital of Asia established in 1882 as Dog Hospital upgraded to Pet Centre with up gradation of the college to University in 2002. Before this new setup, the dog hospital had been engaged to provide indoor & outdoor treatment facilities to the dogs and cats. At present the treatment and advisory facilities have been extended to all Pet & Wild animals and birds. The strength of the technical staff has also been increased to cope up with the number of the patients brought to the hospital for treatment. The centre is working under the supervision of six staff members specialized in this particular area. With this provision the centre is working round the

clock for the welfare of the patients and convenience of the pet owners. The centre has been equipped with modern facilities for medicine and surgery including diagnostics and emergency care.

Facilities Available

- Hospital Services available 24/7
- Soft Tissue Surgery
- Hard tissue Orthopedic Surgery
- Digital Radiography (X-rays)
- Endoscopy (Gastro-duodenoscopy)
- Ultrasonography
- Veterinary Diagnostic Laboratory
- Chemotherapy of Cancer Patients
- · Emergency and Critical Care
- Indoor Admission Facility for Dogs
- Admission facility for cats
- Pet's grooming services
- Ticks Control Program
- Pet Owner Education programs through Electronic and Print media

Pet Breeding, Training & Research Centre

- Various Dog Breeds available for Sale
- Services available for Basic Obedience Training of Dogs
- Services available for Arms and Explosives Sniffer Training of Dogs
- Services available for Tracker Training of Dogs
- Stud Dogs are also available





Doctor of Veterinary Medicine (DVM)

Historically, academic activity was started in 1882 in this institution, which was then named as Veterinary School which was probably the first of its kind in the region. By the end of 19th century, the institution was raised to the status of Punjab Veterinary College. The name of degree program also varied between B.V.Sc. and B.Sc. (A.H.). The College was affiliated with the University of the Punjab in year 1942, and then with the University of Agriculture, Faisalabad in 1971 with the name of College of Veterinary Sciences, Lahore. In 2002, the College was upgraded to the status of University of Veterinary and Animal Sciences, Lahore-Pakistan.

Existing 5-year DVM composite degree program was recommended and approved by Pakistan Veterinary Medical Council and enjoys support of Higher Education Commission, Islamabad. Aim of this revised degree was to prepare a graduate whose skills meet the needs of private and public sectors, livestock farmers, stake holders and other employment providers. Another perspective for revision of curricula was to meet the international standards as a large number of our graduates opt for international graduate schools and licensing examinations.

The program consists of pre-clinical, clinical and livestock management related courses compliant with OIE guidelines on Day 1 Core Competencies of veterinary graduates, promoting one health concept and meeting our local societal needs. The scheme of courses is designed in such a way that the students will spend first six semesters at City Campus to study pre-clinical and veterinary courses. Next three semesters are offered at Ravi Campus, Pattoki, where there is more focus on livestock and poultry management related courses as well as Medicine, Surgery and Animal Reproduction clinics. To expose our DVM graduates to real world field situations and challenges and to enhance their professional skills and competencies, last 10th semester mainly consists of very extensive internship program.

The DVM degree enables the graduates to manage livestock and poultry farms and deal with all kinds of clinical situations and emergencies. Successful graduates can get employment in diverse area of fields related directly and indirectly in animal agriculture sector mainly in Livestock & Dairy Development Departments of all

provinces of Pakistan. The public sector placements mainly include those in Veterinary Hospitals, Disease Diagnostic Labs, Breed Improvement, Livestock Farms, Extension Services, and Research Directorates. Some of them join the academia and others decide to go abroad. Numerous graduates from UVAS are now practicing vets in North America and other developed countries. UVAS veterinary graduates also serve as commissioned officers in Pakistan Army (RV&FC) and Rangers. Various national and multinational dairy and poultry companies and NGOs look forward with exciting packages to hire vet graduates for their agro-livestock services, farms and processing plants. In short, this is a unique professional degree which enables the graduate to choose from a multitude of options and build an exciting career.

Moreover, for further improvement of veterinary education, UVAS in collaboration with the university of Melbourne, Australia is undergoing formal twining project between two institutions. OIE is ready to provide an oversight and review of the project. The twining project will help support capacity building of the faculty for its future accreditation with AVMA-CoE.

Similarly, over a dozen of our faculty members have got enrolled with Royal Veterinary College, London, UK, for online one year postgraduate diploma course in veterinary education. With this trained manpower UVAS is planning to initiate M.Sc. degree program in veterinary education. This program would be unique in this part of the world as no veterinary institution in this region is offering such program.

SCHEME OF STUDIES OF DVM DEGREE PROGRAM

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
ANAT-02101	Veterinary Anatomy – I	3 (1-2)
ANAT-02102	General Veterinary Histology	2 (1-1)
PHYS-02103	Veterinary Physiology-I	3(2-1)
BIOC-02104	Biochemistry	4(3-1)
LPRO-02105	Fundamentals of Livestock Production	2(1-1)
ENGL-02106	English- I (Functional English)	2 (2-0)
SOSC-02107/	Holy Quran Translation-I/	
SOSC-02108	Ethics-I	1(1-0)
	Sub Total	17(11-6)
	SEMESTER TWO	
ANAT-02201	Veterinary Anatomy-II	3(1-2)
ANAT-02202	Systemic Veterinary Histology and Embryology	3(2-1)
PPRO-02203	Introduction to Poultry Production	1(1-0)
PHYS-02204	Veterinary Physiology-II	4(3-1)
MICR-02205	General Veterinary Microbiology	3(2-1)
LPRO- 02206	Animal Welfare and Ethics	2(2-0)
SOSC-02207	English-II (Communication Skills)	2(2-0)
SOSC-02208	Islamic Studies/Ethics	1(1-0)
MICR-02209	Biorisk Management (BRM)	2(1-1)
	Sub Total	21(15-6)
	SEMESTER THREE	21(100)
PHRM-02301	General and Systemic Pharmacology	4(3-1)
PATH-02302	General Veterinary Pathology	3(2-1)
PARA-02303	General Veterinary Parasitology and Protozoology	3(2-1)
SOSC-02304	Anthropology	1 (1-0)
MICR-02305	Veterinary Immunology	2(1-1)
MICR-02306	Molecular Biology	2(1-1)
STCS-02307	Bio-statistics	3(2-1)
CEDU-02308	Livestock Extension Education	2 (2-0)
SOSC-02309/	Holy Quran Translation-II/	2 (2-0)
SOSC-02309/	Ethics-II	1(1-0)
3030-02310	Sub Total	21(15-6)
	SEMESTER FOUR	21(13-0)
PHRM-02401		4(3-1)
PATH-02402	Veterinary Chemotherapy and Toxicology Systemic Veterinary Pathology	3(2-1)
PARA-02402	Veterinary Helminthology	4(3–1)
MICR-02404		
STCS-02404	Veterinary Bacteriology and Mycology Mathematics	3(2-1)
DEBM-02406	Livestock Economics And Business Management	2(2-0) 2(2-0)
EPPH-02407	Zoonoses and Food Safety	3(2-1)
EPPП-02401	Sub Total	21(16-5)
		21(10-3)
THED AREA	SEMESTER FIVE	0/0.4\
THER-02501	Veterinary Reproductive Physiology	3(2-1)
CLMS-02502	Veterinary Internal Medicine-I	4(3-1)
CLMS-02503	Anaesthesiology and Intensive Care	1(0-1)
PATH-02504	Veterinary Clinical Pathology Veterinary Entomology and Acarology	1(0-1)
	LVOTORINARY Entomology and Acarology I	3(2–1)
PARA-02505		0 (0 1)
PARA-02505 MICR-02506	Veterinary Virology	3(2-1)
PARA-02505 MICR-02506 EPPH-02507	Veterinary Virology Veterinary Epidemiology and Public Health	3(2-1)
PARA-02505 MICR-02506 EPPH-02507 CLMS-02508	Veterinary Virology Veterinary Epidemiology and Public Health Large Animal Surgery and Shoeing	
PARA-02505 MICR-02506 EPPH-02507 CLMS-02508 SOSC-02509/	Veterinary Virology Veterinary Epidemiology and Public Health Large Animal Surgery and Shoeing Holy Quran Translation-III/	3(2-1) 4(3-1)
PARA-02505 MICR-02506 EPPH-02507 CLMS-02508	Veterinary Virology Veterinary Epidemiology and Public Health Large Animal Surgery and Shoeing	3(2-1)

Course No.	Course Title	Credit Hours
	SEMESTER SIX	
CLMS-02601	Medicine Clinic-I	1(0-1)
CLMS-02602	Surgery Clinic – I	1(0-1)
THER-02603	Theriogenology Clinic – I	1(0-1)
PATH-02604	Poultry Pathology	3(2-1)
THER-02605	Obstetrics and Genital Diseases	3(2-1)
CLMS-02606	Veterinary Internal Medicine-II	3(3-0)
SOSC-02606	Pakistan Studies	1(1-0)
CLMS-02608	Small Animal Surgery	3(2-1)
CLMS-02609	Diagnostic Imaging	2(1-1)
PATH-02610	Meat Inspection and Necropsy Practice	3(2-1)
	Sub Total	21(13-8)
	SEMESTER SEVEN	
THER-02701	Reproductive Biotechnology	2(2-0)
THER-02702	Theriogenology Clinic – II	1(0-1)
CLMS-02703	Surgery Clinic – II	1(0-1)
CLMS-02704	Medicine Clinic-II	1(0-1)
CLMS-02705	Veterinary Internal Medicine-III	3(3-0)
PPRO-02706	Commercial Poultry Production	2(1-1)
WECO-02707	Lab and Zoo Animal Management	1(0-1)
LPRO-02708	Animal Breeding and Genetics – I	2(1-1)
AQFS-02709	Fisheries and Aquaculture	1(0-1)
NUTR-02710	Principles of Animal Nutrition	3(2-1)
SOSC-02711/	Holy Quran Translation-IV/	
SOSC-02712	Ethics-IV	1(1-0)
	Sub Total	18(10-8)
	SEMESTER EIGHT	
CLMS-02801	Medicine Clinic III	2(0-2)
CLMS-02802	Surgery Clinic III	2(0-2)
THER-02803	Theriogenology Clinic III	2(0-2)
LPRO-02804	Beef and Mutton Production	2(1-1)
LPRO-02805	Animal Breeding and Genetics – II	3(2-1)
PPRO-02806	Breeder and Hatchery Management	3(2-1)
NUTR-02807	Livestock Feed Resources and Forage Conservation	3(2-1)
	Sub Total	17(7-10)
	SEMESTER NINE	- / - ·
CLMS-02901	Medicine Clinic-IV	2(0-2)
CLMS-02902	Surgery Clinic – IV	2(0-2)
THER-02903	Theriogenology Clinic – IV	2(0-2)
APTC-02905	Dairy Technology	2(1-1)
LPRO-02906	Principles of Dairy Production	3(2-1)
NUTR-02907	Poultry Nutrition and Feed Technology	2(1-1)
DEBM-02908	Entrepreneurship	1(0-1)
	Sub Total	14(4-10)
	SEMESTER TEN	
SOSC-021001		2 (2-0)
B) (14) 22 (2)	and Presentation)	
DVMI-021002	Internship	0 (5 3)
	Sub Total	2 (2-0)
	Grand Total	1/5(108-67)



Institute of Microbiology (IOM)

BS Applied Microbiology

This degree primarily focuses on the pathogenic potential of the microbes that cause diseases in human and animals. This program covers different aspects of the physiology, biochemistry, and genetics of the microorganisms. Recent advances in molecular biology helped us explore the disease process at molecular level. To benefit the human and animal health as a slogan of 'One World One Health, we train our students in veterinary medical and food microbiology, environmental microbiology, pharmaceutical microbiology. We take pride in training our graduates in state-of-theart facilities for biologics production (vaccines, diagnostics and probiotics).

SCHEME OF STUDIES FOR BS APPLIED MICROBIOLOGY

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
MICR-05101	Fundamentals of Microbiology	4(3-1)
MICR-05102	Cell Biology	4(3-1)
STCS-05103	Applications of Information and Communication Technologies (ICT)	3(2-1)
SOSC-05104	Functional English	3(3-0)
STCS-05105	Biomathematics	3(3-0)
SOSC-05106/	Islamic Studies /	
SOSC-05107	Ethics	2(2-0)
SOSC-05108/	Holy Quran Translation-I/	
SOSC-05109	Ethics-I	1(1-0)
	Sub Total	20(17-3)
	SEMESTER TWO	
MICR-05201	Introduction to Mycology	2(1-1)
MICR-05202	Basic Immunology	3(2-1)
MICR-05203	General Virology	3(2-1)
BTNY-05204	Biodiversity of Plants	3(2-1)
BIOC-05205	Principles of Biochemistry	3(2-1)
SOSC-05206	Expository Writing	3(3-0)
SOSC-05207/		
SOSC-05208	Ideology and Constitution of Pakistan	2(2-0)
	Sub Total	19(14-5)
	SEMESTER THREE	
MICR-05301	Introduction to Cell Culture	3(2-1)
MICR-05302	Bacterial Cell Physiology	4(3-1)
ZOOL-05303	Biodiversity of Animals	3(2-1)
STCS-05304	Biostatistics	3(3-0)
SOSC-05305	Arts and Humanities	2(2-0)
SOSC-05306	*Sociology	2(2-0)
SOSC-05307/	Holy Quran Translation-II/	
SOSC-05308	Ethics-II	1(1-0)
	Sub Total	18(15-3)
	SEMESTER FOUR	
MICR-05401	Fundamentals of Microbial Genetics	3(2-1)
MICR-05402	Antimicrobial Resistance & Probiotics	3(2-1)
MICR-05503	Biorisk Management (Biosafety & Biosecurity)	3(2-1)
PARA-05404	Clinical Parasitology	3(2-1)
DEBM-05405	Entrepreneurship	2(2-0)
SOSC-05406	Civics and Community Engagement	2(2-0)
BIOT-05407	Biotechnology (Minor)	4(3-1)
	Sub Total	20(15-5)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	
MICR-05501	Veterinary Bacteriology	4(3-1)
MICR-05502	Applied Immunology	3(2-1)
MICR-05503	Soil Microbiology	3(2-1)
MICR-05504	Food Microbiology	4(3-1)
SOSC-05505/	Holy Quran Translation-III/	
SOSC-05506	Ethics-III	1(1-0)
BIOT-05507	Basic Bioinformatics (Minor)	2(1-1)
	Sub Total	
	SEMESTER SIX	
MICR-05601	Medical Microbiology	4(3-1)
MICR-05602	Systemic Virology	3(2-1)
MICR-05603	Environmental Microbiology	3(2-1)
MICR-05604	Industrial Microbiology	3(2-1)
PATH-05605	Clinical Pathology	3(2-1)
BIOT-05606	Genomics & Proteomics (Minor)	3(3-0)
	Sub Total	19(14-5)
	SEMESTER SEVEN	
MICR-05701	Pharmaceutical Microbiology	4(3-1)
MICR-05702	Vaccinology	3(2-1)
MICR-05703	Clinical Microbiology	3(2-1)
MICR-05704	Marine and Fresh Water Microbiology	3(2-1)
EPPH-05705	One Health	3(2-1)
SOSC-05706/	Holy Quran Translation-IV	
SOSC-05707	Ethics-IV	1(1-0)
BIOT-05708	Health Biotechnology (Minor)	3(3-0)
	Sub Total	20(15-5)
	SEMESTER EIGHT	
MICR-05801	Capstone Project	3(0-3)
MICR-05802	Internship	3(0-3)
MICR-05803	Emerging Issues in Microbiology	2(2-0)
	Sub Total	8(2-6)
	Grand Total	141(104-37)

The program is offered as Single Major with One Minor. The Minor is in the discipline of Biotechnology.

^{*}This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.





The goal of this program is to develop skilled human resource that can serve in the human diagnostic laboratories as well as in the research institutions

BS Medical Laboratory Technology

Medical Laboratory Technology is the study of sciences related to laboratory analysis of samples from healthy and diseased individuals. In addition to taught courses such as histology, histopathology, hematology, clinical microbiology, parasitology and pathology, laboratory instrumentations, molecular diagnostics, forensic pathology, etc. The students will learn skills essential for performing practical work in the laboratories. This 4-years undergraduate degree program will provide trained human resource to serve in medical diagnostics and research laboratories as well as academic institutions. The institute is equipped with the state-of-the-art laboratories including a Biosafety Level 3 Laboratory for Emerging Pathogens approved from Punjab Heath Care Commission for Covid-19 PCR Testing.

SCHEME OF STUDIES FOR BS MEDICAL LABORATORY TECHNOLOGY

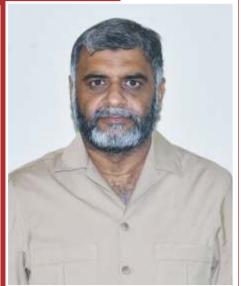
Course No.	Course Title	Credit Hours
	SEMESTER ONE	
MDLT-26101	Fundamentals of Microbiology	4(3-1)
MDLT-26102	Human Anatomy	3(2-1)
MDLT-26103	Human Histology	3(2-1)
STCS-26104	Applications of Information and Communication Technologies (ICT)	3(2-1)
SOSC-26105	Functional English	3(3-0)
SOSC-26106/	Islamic Studies /	, ,
SOSC-26107	Ethics	2(2-0)
SOSC-26108/	Holy Quran Translation-I/	, ,
SOSC-26109	Ethics-I	1(1-0)
	Sub Total	19(15-4)
	SEMESTER TWO	
MDLT-26201	Cell Biology	4(3-1)
PHYS-26202	Human Physiology	3(2-1)
BIOC-26203	Principles of Biochemistry	3(2-1)
STCS-26204	Biomathematics	3(3-0)
SOSC-26205	Ideology and Constitution of Pakistan	2(2-0)
SOSC-26206	Expository Writing	3(3-0)
	Sub Total	18(15-3)
	SEMESTER THREE	
PATH-26301	General Pathology	3(2-1)
MDLT-26302	Immunology	3(2-1)
PATH-26303	Hematology	3(2-1)
PHRM-26304	General Pharmacology and Chemotherapy	3(2-1)
STCS-26305	Biostatistics	3(3-0)
SOSC-26306	Arts and Humanities	2(2-0)
SOSC-26307	*Sociology	2(2-0)
SOSC-26308/	Holy Quran Translation-II/	
SOSC-26309	Ethics-II	1(1-0)
	Sub Total	20(16-4)
	SEMESTER FOUR	
MDLT-26401	Clinical Virology	3(2-1)
PATH-26402	Systemic Pathology	3(2-1)
BIOT-26403	Human Genetics	3(2-1)
EPPH-26404	One Health	3(2-1)
DEBM-26405	Entrepreneurship	2(2-0)
SOSC-26406	Civics and Community Engagement	2(2-0)
MICR-26407	Bacterial Cell Physiology (Minor)	4(3-1)
	Sub Total	20(15-5)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	
MDLT-26501	Medical Microbiology	4(3-1)
PARA-26502	Clinical Parasitology	3(2-1)
PATH-26503	Clinical Pathology	3(2-1)
PATH-26504	Blood Disorder	3(2-1)
MDLT-26505	Biorisk Management (Biosafety & Biosecurity)	3(2-1)
BIOT-26506	Basic Bioinformatics	2(1-1)
SOSC-26507/	Holy Quran Translation-III/	
SOSC-26508	Ethics-III	1(1-0)
MICR-26509	Introduction to Mycology (Minor)	2(1-1)
	Sub Total	21(14-7)
	SEMESTER SIX	
MDLT-26601	Medical Laboratory Instrumentations	3(2-1)
MDLT-26602	Clinical Bacteriology	3(1-2)
MDLT-26603	Molecular Diagnostics	3(2-1)
PATH-26604	Chemical & Forensic Pathology	3(2-1)
PATH-26605	Cytology and Cytogenetics	3(2-1)
MICR-26706	Introduction to Cell Culture (Minor)	3(2-1)
	Sub Total	18(11-7)
	SEMESTER SEVEN	
MDLT-26701	Medical Laboratory Management Skills	3(2-1)
PATH-26702	Blood Banking	3(2-1)
BIOT-26703	Biotechnology	4(3-1)
BIOT-26704	Bioethics	2(1-1)
SOSC-26705/	Holy Quran Translation-IV/	
SOSC-26706	Ethics-IV	1(1-0)
MICR-26707	Vaccinology (Minor)	3(2-1)
	Sub Total	16(11-5)
	SEMESTER EIGHT	
MDLT-26801	Capstone Project	3(0-3)
MDLT-26802	Internship	3(0-3)
MDLT-26803	Advances in Medical Laboratory Technology	2(2-0)
	Sub Total	9(2-7)
	Grand Total	141(99-42)

The program is offered as Single Major with One Minor. The Minor is in the discipline of Microbiology.

^{*}This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.





College of Veterinary & Animal Sciences (CVAS), Jhang

Principal's Message

It is a matter of immense pleasure and pride for me to welcome to the College of Veterinary and Animal Sciences, Jhang which is located 12 Km away from the city on Chiniot road. It comprises two stretches of lands 3 Km apart. First piece of land, comprising 75 acres, have main academic, administrative block, two boys hostels and two girls hostels, post mortem block, spacious grassy lawns, different play grounds, residential colony, network of metal roads, well-furnished labs, principal office, auditorium, library, PERN equipped IT lab, student-teacher center, clinical block, out-door teaching hospital, central mosque, experimental sheds including poultry and livestock forms, free range poultry shed and layer poultry shed, functional meat technology section, horse riding/training club, well equipped labs of different departments. It is worth mentioning that this college has first ever well-equipped and well-furnished ORIC, UVAS BSL(biosafety level) -II plus certified Epidemiology and Public Health lab that is providing the diagnostic facilities of zoonotic diseases.

Second piece of land consists of 25 acres that has functional poultry farm, dairy farm and sheep/ goat fattening sheds for the training of budding veterinarians. This college has highly qualified teachers in different disciplines to impart the quality education to the students. There are five departments in this college namely Department of Clinical Sciences, Department of Pathobiology, Department of Animal Sciences, Department of Basic Sciences and Department of Social Sciences. It is also pertinent to mention that veterinary teaching hospital, which belongs to Department of Clinical Sciences is providing the diagnostic (free of cost), treatment and preventive services to the animals of livestock stakeholders in addition to extension ambulatory services. Against this backdrop, I invite you all for taking admission to this prestigious institution to serve the country by becoming veterinarians with blood and intellect.

Prof. Dr. Muhammad Fiaz Qamar Principal



FACULTY AT CVAS JHANG

DEPARTMENT OF CLINICAL SCIENCES

SECTION OF VETERINARY MEDICINE

Associate Professors

Dr. Farhan Ahmad Atif, Ph.D.

Dr. Amar Nasir, Ph.D. (Tenured)

Assistant Professor

Dr. Muhammad Kashif, Ph.D.

SECTION OF VETERINARY SURGERY & RADIOLOGY

Assistant Professor

Dr. Sayyed Aun Muhammad, Ph.D.

Lecturer

Ms. Farah Ijaz, M.Phil

Mr. Abdul Mateen, M.Phil

SECTION OF THERIOGENOLOGY

Associate Professors

Dr. Abid Hussain Shahzad, Ph.D.

Assistant Professor

Dr. Mubbashar Hassan, Ph.D.

Dr. Ahmad Yar Qamar, Ph.D.

Lecturers

Dr. Sanan Raza, Ph.D.

Mr. Muhammad Ilyas Naveed, M.Phil, (Ph.D. Study Leave)

SECTION OF EPIDEMIOLOGY & PUBLIC HEALTH

Chairman / Professor

Prof. Dr. lahtasham Khan, Ph.D.

Assistant Professors

Dr. Muhammad Farooq, Ph.D.

DEPARTMENT OF PATHOBIOLOGY

Chairman / Professor

Prof. Dr. Syed Ehtisham-ul-Haque, Ph.D.

SECTION OF PATHOLOGY

Associate Professors

Dr. Ishtiaq Ahmed, Ph.D.

Assistant Professors

Dr. Muhammad Sajid, Ph.D.

Dr. Aziz ur Rehman, Ph.D.

Lecturers

Mr. Muhammad Kamran Rafique, M.Phil

SECTION OF MICROBIOLOGY

Professor

Prof. Dr. Syed Ehtisham-ul-Haque, Ph.D.

Associate Professors

Dr. Usman Waheed, Ph.D. (Ex-Pak Leave)

Lecturers

Dr. Aman Ullah Khan, Ph.D.

Mr. Muhammad Adnan Saeed, M.Phil

Mr. Usman Siddque, M.Phil (Visiting)

SECTION OF PARASITOLOGY

Professor

Prof. Dr. Muhammad Fiaz Qamar, Ph.D.

Prof. Muhammad Arfan Zaman, Ph.D. Postdoc (Tenured)

Lecture

Mr. Kazim Ali, M.Phil (Ex-Pak Study Leave)

Mr. Waleed Akram, M.Phil, Parasitology (Visiting)

DEPARTMENT OF BASIC SCIENCES

SECTION OF ANATOMY & HISTOLOGY

Assistant Professors

Dr. Abdul Rehman Ansari, Ph.D. (TTS)

Dr. Arbab Sikandar, Ph.D.

Lecturers

Dr. Komal Khan, Ph.D.

Ms. Rabia Tamkeen, M.Phil (Study Leave)

SECTION OF PHYSIOLOGY & BIO CHEMISTRY

Associate Professor

Dr. Muhammad Arshad, Ph.D. (Tenured)

Assistant Professors

Dr. Mazhar Abbas Ph.D.

Dr. Shaista Abbas, Ph.D.

Lecturer

Ms. Sidra Ashraf, M.Phil

Ms. Tahira Batool (Visiting Physio)

Ms. Zayrah Rafique (Visiting Botany)

SECTION OF PHARMACOLOGY & TOXICOLOGY

Associate Professors

Dr. Tariq Hussain, Ph.D. (Tenured)

Assistant Professors

Dr. Muhammad Adil, Ph.D.

DEPARTMENT OF ANIMAL SCIENCES

SECTION OF ANIMAL NUTRITION

Assistant Professors

Dr. Abdur Rahman, Ph.D.

Dr. Mubarik Mahmood, Ph.D. (TTS)

Lecturers

Ms. Sadia Khanum, M.Sc.

SECTION OF ANIMAL BREEDING & GENETICS

Assistant Professors

Dr. Akhtar Rasool Asif, Ph.D.

Dr. Asghar Hussain, Ph.D.

Lecturers

Mr. Ali Haider Saleem, M.Phil (Ex-Pak Study Leave)

Mr. Muhammad Zahid Farooq, M.Phil, Ph.D.

Mr. Aftab Hussain, M.Phil (Study Leave)

Mr. Kamran Afzal, Visiting (ABG)

SECTION OF POULTRY PRODUCTION

Assistant Professors

Dr. Yassar Abbas, Ph.D.

Lecturers

Ms. Kanwal Rafique, M.Phil (Study Leave)

DEPARTMENT OF SOCIAL SCIENCES

Lecturers

Mr. M. Abdul Ayaz Khan, M. Phil

Ms. Sidra Jamil, M.Phil

Mr. Aamir Mahmood, Visiting Lecturer (Ph.D. Math)

Ms. Ain Fatima, Visiting English

Hafiz M. Usman, Visiting Islamic Studies

SECTION OF MEAT SCIENCE & TECHNOLOGY

Assistant Professors

Dr. Muawuz Ijaz, Ph.D. (TTS)

Lecturers

Mr. Muhammad Kashif Yar, Ph.D.

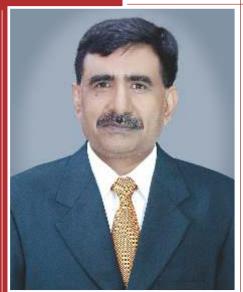
UG Degree Programs offered at Jhang: 04 Programs are being offered:

1- DVM

2- BS Applied Microbiology

3- BS Biological Sciences

4- BS Zoology



Khan Bahadar Chaudhry Mushtaq Ahmed, College of Veterinary & Animal Sciences, (KBCMA-CVAS) Narowal

Principal's Message

It is a cause of great pride and delight for me to welcome you at Khan Bahadar Chaudhry Mushtaq Ahmed College of Veterinary and Animal Sciences, Narowal. This was established as sub-campus of University of Veterinary and Animal Sciences, Lahore in 2017. In the real sense of the term, it is forehead jewelry of district Narowal, because it has the largest livestock population in the Punjab province. The animal lovers keep on preparing the animals for different competitions and livestock production. CVAS, Narowal renders invaluable services/guidance to the stakeholders about the husbandry and health of the animals for Narowal area and region.

College of Veterinary and Animal Sciences, Narowal is located at 5-KM Shakargarh Road, Narowal. It has a vast area comprising of 107 acres of land where various components (Academic block, Administration block, Boys and Girls hostels, Clinical facility, Diagnostic lab, Student teacher center, Residential colony, Beautiful parks, Network of roads connecting all parts of the College). It is pertinent to mention that Department of Pathobiology, Department of Clinical Sciences, Department of Animal Sciences, Department of Basic Sciences and

Department of Social Sciences are working in the College. The College is the state of the art with all modern facilities for diagnosis, treatment of livestock & poultry diseases and also in the field of teaching & research, so that produced veterinarians may be enabled to play a key role in the progress and economy of the country. This college has a good team of experienced and qualified teachers, who are engaged with devotion and dedication in teaching and research. Presently we are offering DVM (Morning & Evening), Livestock Assistant Diploma, (Morning & Evening) NAVTTC AIT, and M.Phil in various Subjects in the college. Come and join this prestigious institution to ameliorate your lot for serving Pakistan with blood and intellect.

Meritorious Professor Dr. Muhammad Younus Rana, (DLA.*I, T.I*), Ph.D., Post Doc. (USA) Principal



FACULTY AT KBCMA CVAS, NAROWAL

Meritorious Professor/Principal:

Prof. Dr. Muhammad Younus Rana, (DLA.1, T.1),

Ph.D, Post Doc. (USA)

Professors:

Prof. Dr. M. Rizwan Yousaf, Ph.D.

Prof. Dr. Muhammad Yaqoob, Ph.D.

Prof. Dr. Aman-Ullah, Ph.D.

Associate Professor:

Dr. Ali Ahmad, Ph.D.

Assistant Professors:

Dr. Shahid Hussain Farooqi, Ph.D.

Dr. Qaiser Akram, Ph.D.

Dr. Zeeshan Iqbal, Ph.D.

Dr. Sarfraz Ahmad, Ph.D.

Dr. Waqas Ahmad, Ph.D.

Dr. Beenish Zahid, Ph.D.

Dr. Hafiz Muhammad Rizwan, Ph.D.

Lecturers:

Dr. Muhammad Asif Idrees, Ph. D., Post Doc. (USA)

Dr. Muhammad Imran, Ph. D.

Dr. Muhammad Usman, Ph. D.

Dr. Ahsan Naeem, Ph.D.

Dr. Rubina Yasmeen, Ph.D.

Mr. Muhammad Khalil Ateeq, M.Phil

Dr. Mohsin Raza, Ph.D.

Mr. Muhammad Umar Farid, M.Phil

Mr. Mian Mubashar Saleem, M.Phil

Mr. Muhammad Asif, M.Phil

Mr. Muhamamd Rafi Ullah, M.Phil

Mr. Haider Abbas, M.Phil

Mr. Hafiz Manzoor Ahmad, M.Phil

Mr. Sultan Ali, M.Phil

Mr. Muhammad Sulman Ali Taseer, M.Phil

Mr. Awais Ghaffar, M.Phil (Ex-Pak Leave)

Mr. Syed Haider Zaman, M. Phil

Mr. Muhammad Akhlaq Mansoor, M. Phil

Dr. Sohrab Ahmad, Ph.D.

Mr. Muhammad Muneeb Rauf, MS (South Africa)

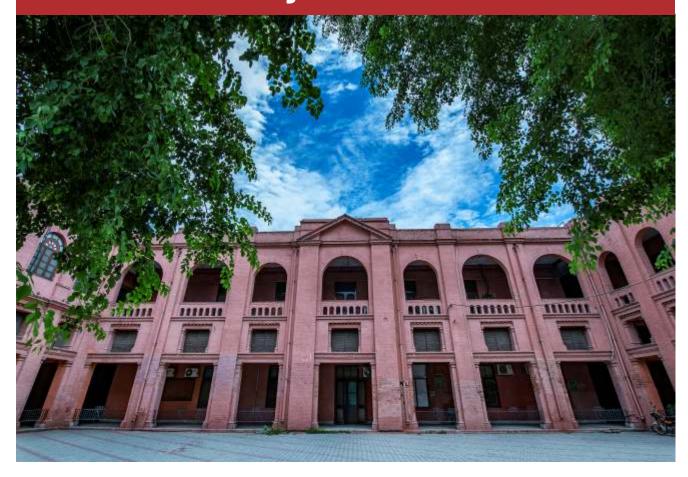
Mr. Muhammad Nadeem Saleem, M. Phil

Mr. Muhammad Hanzallah, M. Phil

UG Degree Programs offered at Narowal: 04 Programs are being offered:

- 1- DVM
- 2- BS Applied Microbiology
- 2- BS Medical Laboratory Technology

History is Priceless





FACULTY OF BIO-SCIENCES (FBS)

Dean's Message

University of Veterinary & Animal Sciences Lahore, Pakistan is one of its own kinds of university taking into account the natural environment to work in the research and open fields of various disciplines. Faculty of Bio-Sciences, being the largest faculty of the university caters the responsibilities conferred upon it. We have taken research education as of paramount importance and our students are performing remarkable well in their respective fields. FBS offers under-graduate and Postgraduate degree programs like Biochemistry, Biotechnology, Anatomy & Histology, Physiology, Environmental Sciences and Food sciences & Human Nutrition. These departments have further created linkages and hub globally to boast the applicable research on real-world problems. UVAS adopts a seamless approach towards learning and teaching.

The faculty is well educated and well trained to combat the modern needs of education system hence goes through capacity building trainings and mandatory digital literacy workshops round the year.

UVAS is equipped with the laboratories that are conceivably considered the state of the art level and this embarks the insignia of facilitation for the students. We welcome you in the brilliant sphere of learning and seeking opportunities to set your careers and pursuing the best we have for you.

Best Wishes! **Prof. Dr. Habib-ur-Rehman** Dean, FBS



FACULTY OF BIO SCIENCES

DEPARTMENT OF PHARMACOLOGY & TOXICOLOGY

Chairman/Professor

Prof. Dr. Muhammad Ovais Omer, Ph.D.

Professor

Prof. Emeritus Dr. Muhammad Ashraf, Ph.D

Associate Professor

Dr. M. Adil Rasheed, Ph.D.

Assistant Professor

Dr. Adeel Sattar. Ph.D.

Lecturer

Dr. Qamar Niaz, Ph.D.

DEPARTMENT OF PHYSIOLOGY

Chairman

Prof. Dr. Imtiaz Rabbani, Ph.D. (Tenured)

Professor

Prof. Dr. Habib-ur-Rehman, Ph.D.

Associate Professor

Dr. M. Shahbaz Yousuf, Ph.D.

Assistant Professor

Dr. Khalid Abdul Majeed, Ph.D.

Dr. Sajid Khan Tahir, Ph.D.

Lecturers

Dr. Muhammad Saad Khilji, Ph.D.

Mr. Abdullah Arif Saeed, M. Phil

Mr. Fahad Rafiq, M.Phil

Mr. M. Arif. M. Phil

DEPARTMENT OF ANATOMY & HISTOLOGY

Chairperson/Professor

Prof. Dr. Hafsa Zaneb (Tenured)

Professor

Prof. Dr. Saima Masood, (Tenured)

Assistant Professors

Mr. Saleem Qaiser,

Dr. Saima Ashraf, Ph.D.

Dr. Sahar Ijaz, Ph.D.

Lecturers

Dr. Mirza Muhammad Usman, Ph.D (Scholar)

Dr. Hafiz Faseeh-ur-Rehman, Ph.D

Dr. Khizar Hayat, Study leave

DEPARTMENT OF ENVIRONMENTAL SCIENCES

Chairman / Associate Professor

Dr. Saif-ur-Rehman Kashif, Ph.D, PostDoc.

Assistant Professors

Dr. Fariha Arooj, Ph.D (TTS).

Dr. Muhammad Luqman, Ph.D (TTS)

Dr. Syed Aziz Ur Rehman, Ph.D (TTS)

Lecturers

Mr. Muhammad Awais Khalid, M.Phil

Ms. Isbah Hameed, M.Phil (Study Leave)

Ms. Saman Sana, M. Phil

Ms. Aysha Iftikhar, M.Phil (Study Leave)

DEPARTMENT OF FOOD SCIENCE & HUMAN NUTRITION

Chairman

Dr. Sanaullah Iqbal, Ph.D.

Associate Professor

Dr. Azmat Ullah, Ph.D.

Dr. Wagas Ahmed, Ph.D.

Dr. Muhammad Sohaib, Ph.D.

Dr. Hafiz Muhammad Shahbaz. Ph.D.

Dr. Qaisar Raza, Ph.D.

Lecturers

Dr. Muhammad Asif Ali, Ph.D.

Ms. Amina Chughtai, M.Phil

Mr. Haroon Jamshaid Qazi, Ph.D. (on study leave)

 $\textbf{Ms. Rattan Kaur Chawla,} \, \textbf{M.Phil} \, (\text{on leave})$

Mrs. Rakhshanda Batool, M.Phil

DEPARTMENT OF SOCIAL SCIENCES

Chairman / Associate Professor

Dr. Hafiz Hussain Azhar, Ph.D.

Assistant Professor

Dr. Muhammad Sarwar, Ph.D.

Lecturers

 $\pmb{\mathsf{Ms.}}\, \pmb{\mathsf{Rafia}}\, \pmb{\mathsf{Kiran}}\, \pmb{\mathsf{Zahid}}, \mathsf{M.Phil}$

Ms. Aneela Iftikhar, M. Phil

Mr. Abdul Rehman, M.Phil

INSTITUTE OF BIOCHEMISTRY & BIOTECHNOLOGY

Professor/Director

Prof. Dr. Wasim Shehzad, Ph.D.

Professors

Prof. Dr. Ali Raza Awan, Ph.D. Post. Doc (Tenured)

Prof. Dr. Muhammad Yasir Zahoor, Ph.D. Post Doc.

Prof. Dr. Muhammad Tayyab, Ph.D. (Tenured)

Associate Professors

Dr. Muhammad Wasim. Ph.D.

Dr. Rahat Naseer, Ph.D.

Dr. Muhammad Imran, Ph.D. (Tenured)

Dr. Maryam Javed, Ph.D. (Tenured)

Dr. Sehrish Firyal, Ph.D. (Tenured)

Assistant Professors

Mr. Shahid Abbas, M. Phil

Dr. Shagufta Saeed, Ph.D.

Dr Muhammad Muddassir Ali, Ph.D.

Dr. Syed Qasim Raza, Ph.D.

Dr. Sadia Nawaz, Ph.D.

Dr. Huma Mujahid, Ph.D.

Dr. Muhammad Imran, Ph.D.

Lecturers

Mr. Muhammad Sheraz Yasin M.Phil

Mr. Muhammad Bilal Bhatti, M.Phil (Visiting)

Ms. Sadia Akbar, M.Phil (Visiting)

Ms. Hira Zulfiqar, M.Phil (Visiting)

Ms. Rabia Latif, M.Phil (Visiting)

Ms. Mubashra Habib, M.Phil (Visiting)

INSTITUTE OF PHARMACEUTICAL SCIENCES (IPS)

Director/Associate Professor

Dr. Tahir Mehmood Khan, Ph.D.

Associate Professor

Dr. Muhammad Khurram Wagas, Ph.D.

Assistant Professors

Dr. Shaista Qamar, Ph.D.

Dr. Allah Bukhsh, Ph.D.

Dr. Sadia Chaman, Ph.D.

Dr. Muhammad Usman, Ph.D.

Dr. Hafiz Awais Nawaz, Ph.D.
Dr. Syed Muhammad Muneeb Anjum, Ph.D.

Dr. M. Irfan Masood, Ph.D.

Dr. Muhammad Irfan Siddigue, Ph.D.

Dr. Hamid Saeed Shah, Ph.D.

Dr. Adeel Masood Butt, Ph.D.

Dr. Tahir Ali Chohan, Ph.D.

Dr. Muhammad Hasnat, Ph.D.

Dr. Muhammad Faisal Nadeem, Ph.D.

Lecturers

Dr. Kashif Maqbool Khan, Ph.D.

Dr. Hammad Saleem, Ph.D.

Dr. Talib Hussain, Ph.D.

Dr. Shoaib Ali Gill, Ph.D.

Dr. Khezar Hayat, Ph.D.

Mr. M. Nabeel Shahid, (Ph.D. Scholar)

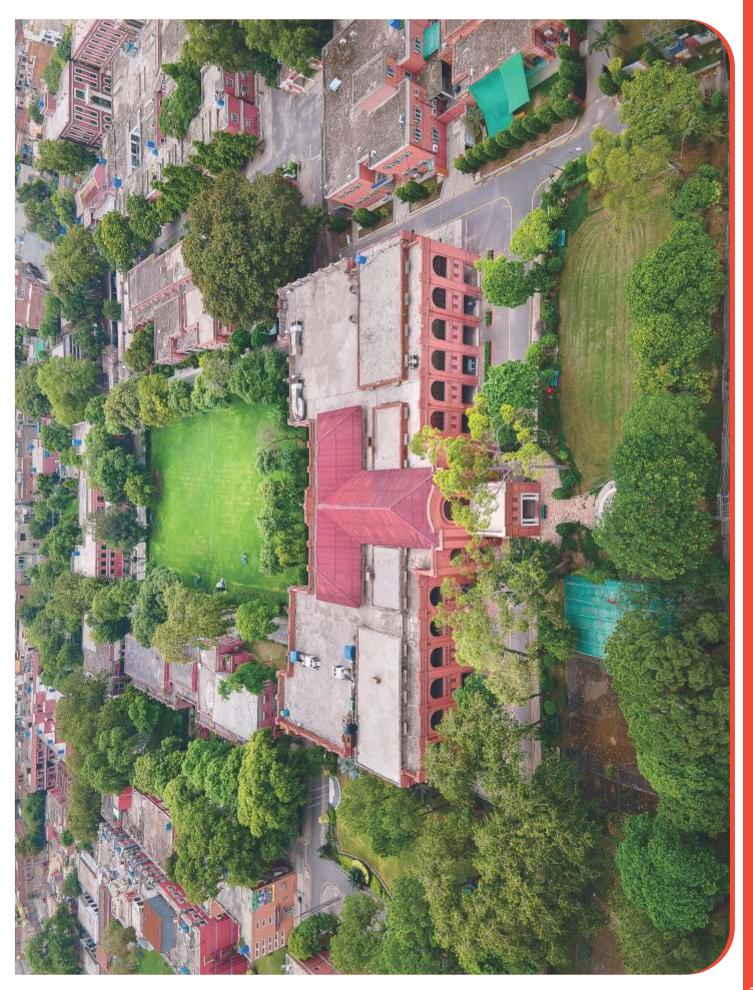
Mr. Tabish Ali, (On Ph.D. Study leave)

Mr. Ammar Sarwer, (On Ph.D. Study leave)

Ms. Husnul Maab, (Ph.D. Scholar)

Ms. Rabia Khokhar, (Ph.D. Scholar)

Mr. Muhammad Zeeshan Munir, (Ph.D. Scholar)





Department of Food Science & Human Nutrition (FS&HN)

BS Nutrition & Dietetics

Nutrition is the science that deals with food and its components in relation to human body whereas Dietetics is the practical application of this scientific knowledge for improving and maintaining human health. The role of nutrition (dietetics) in the prevention and management of diseases is largely un-explored due to the nonexistence of this vital discipline in the country. Keeping in view the core significance and vast scope, the Department of Food Science & Human Nutrition is offering four years degree program, "BS Nutrition & Dietetics" (Morning/Evening).

This degree program will enable the students to excel professionally in the field of dietetics and public health through meeting today's market requirements. The students after graduation will be able to demonstrate their expertise in multiple fields:

- As dietitians in hospitals and private clinics providing medical nutrition therapy and nutritional counseling.
- As community nutritionists working with different national and international organizations imparting nutrition education and awareness regarding healthy eating habits for the prevention of nutritional diseases and promotion of health.
- As nutritionists for public and private sector organizations dealing with nutrition supplements.
- As nutrition officers and researchers in the nutrition wing of health department.

SCHEME OF STUDIES FOR BS HUMAN NUTRITION AND DIETETICS

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
NUTD-10101	Fundamentals of Human Nutrition	3(3-0)
NUTD-10102	Introduction to Human Anatomy and Histology	3(2-1)
SOSC-10103	Functional English	3(3-0)
STCS-10104	Applications of Information and Communication Technologies (ICT)	3(2-1)
STCS-10105	Biomathematics	3(3-0)
SOSC-10106	Ideology and Constitution of Pakistan	2(2-0)
	Sub Total	17(15-2)
	SEMESTER TWO	
NUTD-10201	Fundamentals of Food Processing and Preservation	3(2-1)
NUTD-10202	Macronutrients in Human Nutrition	3(3-0)
PHYS-10203	Human Physiology	3(2-1)
BIOC-10204	Principles of Biochemistry	3(2-1)
SOSC-10205	Expository Writing	3(3-0)
SOSC-10206	Islamic Studies/	,
SOSC-10207	Ethics	2(2-0)
DEBM-10208	Entrepreneurship	2(2-0)
SOSC-10209	Holy Quran Translation-I/	, ,
SOSC-10210	Ethics-I	1(1-0)
	Sub Total	20(17-3)
	SEMESTER THREE	
NUTD-10301	Vitamins in Human Nutrition	3(2-1)
NUTD-10302	Minerals in Human Nutrition	3(2-1)
NUTD-10303	Dietetics-I	3(2-1)
NUTD-10304	Nutritional Education and Awareness	3(2-1)
STCS-10305	Biostatistics	3(3-0)
SOSC-10306	Civics and Community Engagement	2(2-0)
FDST-10307	Unit Operations in Food Industry (Minor-II)	3(2-1)
	Sub Total	20(15-5)
	SEMESTER FOUR	
NUTD-10401	Nutrition Throughout Lifecycle	3(3-0)
NUTD-10402	Disease Prevention Through Nutrition	3(2-1)
PATH-10403	General Pathology	3(2-1)
SOSC-10404	Sociology	2(2-0)
SOSC-10405	Arts and Humanities	2(2-0)
FDST-10406	*Food Analysis (Minor-II)	3(1-2)
BIOC-10407	Analytical Chemistry (Minor-I)	3(2-1)
SOSC-10408	Holy Quran Translation-II/	
SOSC-10409	Ethics-II	1(1-0)
	Sub Total	20(15-5)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	
NUTD-10501	Food Microbiology	3(2-1)
NUTD-10502	Functional Foods and Nutraceuticals	3(3-0)
NUTD-10503	Public Health Nutrition-I	3(2-1)
NUTD-10504	Dietetics-II	3(2-1)
NUTD-10505	Biotechnology in Nutrition and Dietetics	3(2-1)
NUTD-10506	Food Safety and Quality Management	3(3-0)
BIOC-10507	Bioinformatics (Minor-I)	3(1-2)
	Sub Total	21(15-6)
	SEMESTER SIX	
NUTD-10601	Research Planning and Methods in Human Nutrition	3(3-0)
NUTD-10602	Meal Planning and Management	2(1-1)
NUTD-10603	Public Health Nutrition-II	3(2-1)
NUTD-10604	Dietetics-III	3(2-1)
MICR-10605	Immunology	3(2-1)
FDST-10606	Food Plant Layout and Sanitation (Minor-II)	3(3-0)
BIOC-10607	Nutritional Biochemistry (Minor-I)	3(2-1)
SOSC-10608	Holy Quran Translation-III/	
SOSC-10609	Ethics-III	1(1-0)
	Sub Total	21(16-5)
	SEMESTER SEVEN	
NUTD-10701	Proteomics and Nutrigenomics	3(2-1)
NUTD-10702	Food Toxicology and Additives	3(2-1)
NUTD-10703	Sports Nutrition	3(2-1)
NUTD-10704	Community Project	3(0-3)
NUTD-10705	Nutrition and Psychology	2(2-0)
BIOC-10706	Bioenergetics (Minor-I)	3(2-1)
FDST-10707	Food Laws & Regulations (Minor-II)	3(3-0)
	Sub Total	20 (13-7)
	SEMESTER EIGHT	
NUTD-10801	Recent Advances in Clinical Nutrition	2(2-0)
NUTD-10802	Capstone Project	3(0-3)
NUTD-10803	Internship	3(0-3)
SOSC-10804	Holy Quran Translation-IV/	
SOSC-10805	Ethics-IV	1(1-0)
	Sub Total	9 (3-6)
	Grand Total	148 (111-37)

The program is offered as Single Major with Two Minors. The Minors are in the disciplines of Food Sciences and Technology, and Biochemistry.

^{*}This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.





BS Food Science and Technology

This degree program is designed to allow students to professionally excel in the Food Science and Technology field through meeting today's market requirements. The students after graduation will be able to demonstrate their expertise in multiple fields which include:

- Food processing industries to be involved in processing, product development, safety and quality assurance.
- Food safety.
- Food business.
- Food research and development.
- Food technology.



SCHEME OF STUDIES FOR BS FOOD SCIENCE AND TECHNOLOGY

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
FDST-25101	Introduction to Food Science and Technology	3(2-1)
STCS-25102	Biomathematics	3(3-0)
STCS-25103	Biostatistics	3(3-0)
STCS-25104	Applications of Information and Communication Technologies (ICT)	3(2-1)
SOSC-25105	Ideology and Constitution of Pakistan	2(2-0)
SOSC-25106	Functional English	3(3-0)
NUTD-25107	Fundamentals of Human Nutrition (Minor-I)	3(3-0)
	Sub Total	20(18-2)
	SEMESTER TWO	
FDST-25201	Food Processing and Preservation	3(2-1)
MICR-25202	General Microbiology	3(2-1)
SOSC-25203	Islamic Studies/	
SOSC-25204	Ethics	2(2-0)
BIOC-25205	Principles of Biochemistry	3(2-1)
SOSC-25206	Expository Writing	3(3-0)
DEBM-25207	Entrepreneurship	2(2-0)
MICR-25208	Basic Immunology (Minor-II)	3(2-1)
SOSC-25209	Holy Quran Translation-I/	
SOSC-25210	Ethics-I	1(1-0)
	Sub Total	20(16-4)
	SEMESTER THREE	
MICR-25301	Food Microbiology	3(2-1)
FDST-25302	Unit Operations in Food Industry	3(2-1)
FDST-25303	Food Chemistry	3(3-0)
FDST-25304	Postharvest Technology	3(2-1)
FDST-25305	Fruits and Vegetables Processing	
		3(2-1)
FDST-25306	Food Process Engineering	3(2-1)
	Food Process Engineering Civics and Community Engagement	3(2-1) 2(2-0)
FDST-25306	Food Process Engineering Civics and Community Engagement Sub Total	3(2-1)
FDST-25306 SOSC-25307	Food Process Engineering Civics and Community Engagement Sub Total SEMESTER FOUR	3(2-1) 2(2-0) 20(15-5)
FDST-25306 SOSC-25307 FDST-25401	Food Process Engineering Civics and Community Engagement Sub Total SEMESTER FOUR Food Analysis	3(2-1) 2(2-0) 20(15-5) 3(1-2)
FDST-25306 SOSC-25307 FDST-25401 BIOC-25402	Food Process Engineering Civics and Community Engagement Sub Total SEMESTER FOUR Food Analysis Analytical Chemistry	3(2-1) 2(2-0) 20(15-5) 3(1-2) 3(2-1)
FDST-25306 SOSC-25307 FDST-25401 BIOC-25402 SOSC-25403	Food Process Engineering Civics and Community Engagement Sub Total SEMESTER FOUR Food Analysis Analytical Chemistry Sociology	3(2-1) 2(2-0) 20(15-5) 3(1-2) 3(2-1) 2(2-0)
FDST-25306 SOSC-25307 FDST-25401 BIOC-25402 SOSC-25403 SOSC-25404	Food Process Engineering Civics and Community Engagement Sub Total SEMESTER FOUR Food Analysis Analytical Chemistry Sociology Arts and Humanities	3(2-1) 2(2-0) 20(15-5) 3(1-2) 3(2-1) 2(2-0) 2(2-0)
FDST-25306 SOSC-25307 FDST-25401 BIOC-25402 SOSC-25403 SOSC-25404 NUTD-25405	Food Process Engineering Civics and Community Engagement Sub Total SEMESTER FOUR Food Analysis Analytical Chemistry Sociology Arts and Humanities * Nutrition Throughout Lifecycle (Minor-I)	3(2-1) 2(2-0) 20(15-5) 3(1-2) 3(2-1) 2(2-0) 2(2-0) 3(3-0)
FDST-25306 SOSC-25307 FDST-25401 BIOC-25402 SOSC-25403 SOSC-25404 NUTD-25405 MICR-25406	Food Process Engineering Civics and Community Engagement Sub Total SEMESTER FOUR Food Analysis Analytical Chemistry Sociology Arts and Humanities * Nutrition Throughout Lifecycle (Minor-I) Biorisk Management (Biosafety & Biosecurity) (Minor-II)	3(2-1) 2(2-0) 20(15-5) 3(1-2) 3(2-1) 2(2-0) 2(2-0) 3(3-0) 3(2-1)
FDST-25306 SOSC-25307 FDST-25401 BIOC-25402 SOSC-25403 SOSC-25404 NUTD-25405 MICR-25406 MICR-25407	Food Process Engineering Civics and Community Engagement Sub Total SEMESTER FOUR Food Analysis Analytical Chemistry Sociology Arts and Humanities * Nutrition Throughout Lifecycle (Minor-I) Biorisk Management (Biosafety & Biosecurity) (Minor-II) Antimicrobial Resistance and Probiotics (Minor-II)	3(2-1) 2(2-0) 20(15-5) 3(1-2) 3(2-1) 2(2-0) 2(2-0) 3(3-0)
FDST-25306 SOSC-25307 FDST-25401 BIOC-25402 SOSC-25403 SOSC-25404 NUTD-25405 MICR-25406	Food Process Engineering Civics and Community Engagement Sub Total SEMESTER FOUR Food Analysis Analytical Chemistry Sociology Arts and Humanities * Nutrition Throughout Lifecycle (Minor-I) Biorisk Management (Biosafety & Biosecurity) (Minor-II)	3(2-1) 2(2-0) 20(15-5) 3(1-2) 3(2-1) 2(2-0) 2(2-0) 3(3-0) 3(2-1)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	Tiouro
FDST-25501	Food Services and Hospitality Management	3(2-1)
FDST-25502	Food Quality Management	3(3-0)
FDST-25503	Cereal Technology	3(2-1)
FDST-25504	Technology of Fats and Oils	3(2-1)
FDST-25505	Beverage Technology	3(2-1)
NUTD-25506	Functional Foods and Nutraceuticals (Minor-I)	3(3-0)
NUTD-25507	Public Health Nutrition-I (Minor-I)	3(2-1)
	Sub Total	21(16-5)
	SEMESTER SIX	
FDST-25601	Dairy Technology	3(2-1)
FDST-25602	Confectionery and Snack Foods	3(2-1)
FDST-25603	Food Plant Layout and Sanitation	3(3-0)
FDST-25604	Bakery Products Technology	3(2-1)
FDST-25605	Fermentation Technology	2(1-1)
FDST-25606	Meat Technology	3(2-1)
MICR-25607	Industrial Microbiology (Minor-II)	3(2-1)
SOSC-25608	Holy Quran Translation-III/	, ,
SOSC-25609	Ethics-III	1(1-0)
	Sub Total	21(15-6)
SEMESTER SEVEN		
FDST-25701	Food Packaging	3(2-1)
FDST-25702	Food Laws & Regulations	3(3-0)
FDST-25703	Food Product Development & Sensory Acceptability	3(1-2)
FDST-25704	Additives in the Food Industry	3(2-1)
FDST-25705	Food Biotechnology	3(2-1)
FDST-25706	Research Project and Scientific Writing	2(2-0)
DEBM-25707	Food Marketing and Business Management	3(3-0)
	Sub Total	20 (13-7
	SEMESTER EIGHT	
FDST-25801	Internship	3(0-3)
FDST-25802	Capstone Project	3(0-3)
SOSC-25803	Holy Quran Translation-IV/	
SOSC-25804	Ethics-IV	1(1-0)
	Sub Total	7(1-6)

The program is offered as Single Major with Two Minors. The Minors are in the disciplines of Human Nutrition and Dietetics, and

*This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment





Institute of Pharmaceutical Sciences (IPS)

Pharm-D Degree Program

The Institute of Pharmaceutical Sciences (IPS) in the University of Veterinary and Animal Sciences envisions the provision of quality pharmacy education in Pakistan. Pharmacy curriculum and training provided at IPS best meet the needs of the country in line with the international pharmacy education standards so that IPS graduates can effectively contribute to the latest developments in the profession through research, practice and education.

To meet the growing need of pharmacists in the health care system, IPS offers a five years Doctor of Pharmacy (Pharm-D) program which is approved both by the Higher Education Commission (HEC) and Pharmacy Council of Pakistan.

Getting admission in Pharm-D at IPS is highly competitive due to large number of applications received every year. As a graduate of this highly prestigious and well recognized institute, Pharm D pass-outs are enjoying high job placement in public sector (hospital, drug regulatory authority, drug inspectors and drug testing laboratories) and private sector (community pharmacy, manufacturing of drugs, quality assurance, academia, sales and marketing).

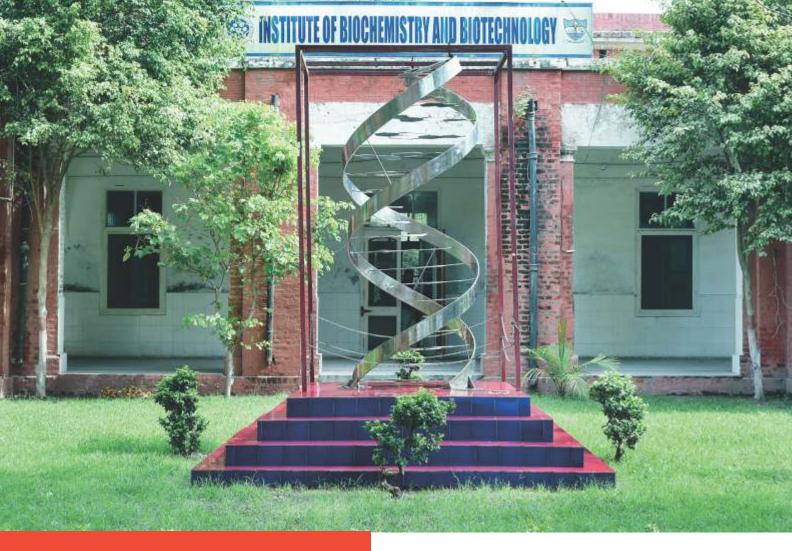
Scheme of Studies for Pharm-D

Course No.		
DUAD 00000		Cred Hour
	SEMESTER ONE	
PHAR 03300	English-A (Functional English)	2
PHAR 03310	Pharmaceutics-IA (Physical Pharmacy) Th.	3
PHAR 03311	Pharmaceutics-IA (Physical Pharmacy) Lab	1
PHAR 03312	Pharmaceutical Chemistry-IA (Organic) Th.	3
PHAR 03313	Pharmaceutical Chemistry-IA (Organic) Lab	1
PHAR 03314	Pharmaceutical Chemistry-II A (Biochemistry) Th.	3
PHAR 03315	Pharmaceutical Chemistry-II A (Biochemistry) Lab.	1
PHAR 03316	Physiology-A Th.	3
PHAR 03317	Physiology-A Lab.	1
PHAR 03318	Anatomy & Histology Th.	3
		_
PHAR 03319	Anatomy & Histology Lab.	1
	Total	22
DLIAD 02204	SEMESTER TWO	4
PHAR 03301	English-B (Communication & Writing skills)	I
PHAR 03320	Pharmaceutics-IB (Physical Pharmacy) Th.	3
PHAR 03321	Pharmaceutics-IB (Physical Pharmacy) Lab.	1
PHAR 03322	Pharmaceutical Chemistry-IB (Organic) Th.	3
	Pharmaceutical Chemistry-IB (Organic) 111.	
PHAR 03323	Pharmaceutical Chemistry-IB (Organic) Lab.	1
PHAR 03324	Pharmaceutical Chemistry-IIB (Biochemistry) Th.	3
PHAR 03325	Pharmaceutical Chemistry-IIB (Biochemistry) lab.	1
PHAR 03326	Physiology-B Th.	3
PHAR 03327	Physiology-B Lab.	1
	Total	20
	SEMESTER THREE	
PHAR 03402	Islamic Studies	3
PHAR 03410	Pharmaceutics-IIA (Dosage Form Science) Th.	3
PHAR 03411	Pharmaceutics-IIA (Dosage Form Science) Lab.	1
FIIAN 03411		-
PHAR 03412	Pharmaceutics-IIIA (Pharmaceutical Microbiology	3
	& Immunology) Th.	
PHAR 03413	Pharmaceutics-IIIA (Pharmaceutical Microbiology	1
	& Immunology) Lab.	
PHAR 03414	Pharmacology and Therapeutics-IA Th.	3
PHAR 03415	Pharmacology and Therapeutics-IA Lab.	1
PHAR 03416	Pharmacognosy-IA (Basic) Th.	3
PHAR 03417	Pharmacognosy-IA (Basic)Lab.	1
PHAR 03418	Pharmacy Practice-IA (Pharmaceutical Methametics) Th	3
1 11AIX 05410	Total	
	Lotal	
		22
DUAD 02402	SEMESTER FOUR	
PHAR 03403	SEMESTER FOUR Pakistan Studies	2
PHAR 03420	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th.	
PHAR 03420	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th.	2
PHAR 03420 PHAR 03421	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab.	2 3 1
PHAR 03420	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology	2
PHAR 03420 PHAR 03421	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th.	2 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th.	2 3 1 3
PHAR 03420 PHAR 03421	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology	2 3 1
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab.	2 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th.	2 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB lab.	2 3 1 3 1
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB lab.	2 3 1 3 1
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th.	2 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab.	2 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th.	2 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab.	2 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03428	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB lab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total	2 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03428	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB lab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total	2 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03428 PHAR 03428	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacoutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB lab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th.	2 3 1 3 1 3 1 3 1 3 21
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03425 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03428 PHAR 03428	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmacy Practice-IIA (Dispensing Pharmacy) Lab.	2 3 1 3 1 3 1 3 21
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03427 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmacy Practice-IIA (Dispensing Pharmacy) Lab. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th	2 3 1 3 1 3 1 3 21
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03425 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03428 PHAR 03428	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Th. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmacy Practice-IIA (Dispensing Pharmacy) Lab. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) The	2 3 1 3 1 3 1 3 21
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03513	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab.	2 3 1 3 1 3 1 3 1 3 21
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03513	Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab.	2 3 1 3 1 3 1 3 1 3 21
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03513	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Lab. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Therapeutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th.	2 3 1 3 1 3 1 3 1 3 21
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03513 PHAR 03514 PHAR 03515	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Therapeutical Chemistry-IIIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIIA Lab.	2 3 1 3 1 3 1 3 1 3 21 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03512 PHAR 03513 PHAR 03514 PHAR 03515 PHAR 03516	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIIA Lab. Pharmacognosy-IIA (Advanced) Th.	2 3 1 3 1 3 1 3 1 3 21 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03512 PHAR 03513 PHAR 03514 PHAR 03515 PHAR 03516	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIIA Lab. Pharmacognosy-IIA (Advanced) Th.	2 3 1 3 1 3 1 3 1 3 21 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03512 PHAR 03513 PHAR 03515 PHAR 03516 PHAR 03516 PHAR 03516	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab.	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03428 PHAR 03510 PHAR 03511 PHAR 03512 PHAR 03513 PHAR 03515 PHAR 03516 PHAR 03517 PHAR 03518	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB lab. Pharmacology and Therapeutics-IB lab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmacy Practice-IIA (Dispensing Pharmacy) Lab. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th Pharmacoutical Chemistry-IIIA (Pharmaceutical Analysis) Th Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th.	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03512 PHAR 03513 PHAR 03515 PHAR 03516 PHAR 03516 PHAR 03517	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Th. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Lab.	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03428 PHAR 03510 PHAR 03511 PHAR 03512 PHAR 03513 PHAR 03515 PHAR 03516 PHAR 03517 PHAR 03518	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB lab. Pharmacology and Therapeutics-IB lab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmacy Practice-IIA (Dispensing Pharmacy) Lab. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Lab.	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03513 PHAR 03515 PHAR 03516 PHAR 03516 PHAR 03518 PHAR 03518 PHAR 03519	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB lab. Pharmacology and Therapeutics-IB lab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmacy Practice-IIA (Dispensing Pharmacy) Lab. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) The Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) The Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Lab. Total	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03512 PHAR 03513 PHAR 03515 PHAR 03516 PHAR 03517 PHAR 03518	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Lab. Total SEMESTER SIX Pharmacy Practice-IIB (Community, Social &	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03513 PHAR 03515 PHAR 03516 PHAR 03516 PHAR 03518 PHAR 03518 PHAR 03519	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Lab. Total SEMESTER SIX Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy)	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03513 PHAR 03515 PHAR 03515 PHAR 03516 PHAR 03516 PHAR 03517 PHAR 03518 PHAR 03519	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Lab. Total SEMESTER SIX Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy)	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03513 PHAR 03515 PHAR 03516 PHAR 03516 PHAR 03516 PHAR 03517 PHAR 03518 PHAR 03519 PHAR 03519 PHAR 03520 PHAR 03522	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Th. Pathology Lab. Total SEMESTER SIX Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy) Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) Therapeutical Chemistry-IIIB (Pharmaceutical Analysis) Therapeutic	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03428 PHAR 03511 PHAR 03511 PHAR 03511 PHAR 03514 PHAR 03515 PHAR 03515 PHAR 03516 PHAR 03517 PHAR 03517 PHAR 03518 PHAR 03519 PHAR 03519 PHAR 03520 PHAR 03522	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Lab. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) ThPharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) ThPharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Th. Pathology Lab. Total SEMESTER SIX Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy) Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) ItPharmaceutical Analysis) ItPharmaceutical Analysis) ItPharmaceutical	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03512 PHAR 03515 PHAR 03515 PHAR 03516 PHAR 03516 PHAR 03517 PHAR 03518 PHAR 03519 PHAR 03520 PHAR 03522 PHAR 03523 PHAR 03523	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) The Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Lab. Total SEMESTER SIX Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy) Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) The Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) Ial Pharmaceutical Analysis) Ial	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03422 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03425 PHAR 03426 PHAR 03427 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03512 PHAR 03515 PHAR 03515 PHAR 03516 PHAR 03516 PHAR 03517 PHAR 03518 PHAR 03519 PHAR 03520 PHAR 03522 PHAR 03523 PHAR 03523	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) The Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Lab. Total SEMESTER SIX Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy) Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) Ial Pharmacology and Therapeutics-IIB Th. Pharmacology and Therapeutics-IIB IPharmaceutical Analysis) Ial Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) Ial Pharmacology and Therapeutics-IIB Th. Pharmacology and Therapeutics-IIB Lab.	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3
PHAR 03420 PHAR 03421 PHAR 03423 PHAR 03423 PHAR 03424 PHAR 03425 PHAR 03426 PHAR 03426 PHAR 03427 PHAR 03510 PHAR 03511 PHAR 03511 PHAR 03515 PHAR 03515 PHAR 03516 PHAR 03516 PHAR 03517 PHAR 03518 PHAR 03519 PHAR 03520 PHAR 03522 PHAR 03523 PHAR 03524	SEMESTER FOUR Pakistan Studies Pharmaceutics-IIB (Dosage Form Science) Th. Pharmaceutics-IIB (Dosage Form Science) Lab. Pharmaceutics-IIB (Pharmaceutical Microbiology & Immunology) Th. Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab. Pharmacology and Therapeutics-IB Th. Pharmacology and Therapeutics-IB Iab. Pharmacology and Therapeutics-IB Iab. Pharmacognosy-IB (Basic) Th. Pharmacognosy-IB (Basic) Lab. Pharmacy Practice-IB (Bio-statistics) Th. Total SEMESTER FIVE Pharmacy Practice-IIA (Dispensing Pharmacy) Th. Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) The Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab. Pharmacology and Therapeutics-IIA Th. Pharmacology and Therapeutics-IIA Lab. Pharmacognosy-IIA (Advanced) Th. Pharmacognosy-IIA (Advanced) Lab. Pathology Th. Pathology Lab. Total SEMESTER SIX Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy) Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) The Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) Ial Pharmaceutical Analysis) Ial	2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3

Course No.	Course Title	Credit
PHAR 03528	Pharmacy Practice-III (Computer and its	Hours 3
1 1 IAIX 03320	Applications in Pharmacy) Th.	
PHAR 03529	Pharmacy Practice-III (Computer and its	1
	Applications in Pharmacy) Lab Total	19
	SEMESTER SEVEN	19
PHAR 03610	Pharmacy Practice-IVA (Hospital Pharmacy) Th.	3
PHAR 03612	Pharmacy Practice-VA (Clinical Pharmacy) Th.	3
PHAR 03613 PHAR 03614	Pharmacy Practice-VA (Clinical Pharmacy) Lab. Pharmaceutics-IVA (Industrial Pharmacy) Th.	1 3
PHAR 03615		1
PHAR 03616	Pharmaceutics-VA (Biopharmaceutics	3
	Pharmacokinetics) Th.	
PHAR 03617	Pharmaceutics-VA (Biopharmaceutics & Pharmacokinetics) Lab.	1
PHAR 03618	Pharmaceutics-VIA (Pharmaceutical Quality	3
1100000	Management) Th.	
PHAR 03619	Pharmaceutics-VIA (Pharmaceutical	1
	Quality Management) Lab.	19
	SEMESTER EIGHT	19
PHAR 03620	Pharmacy Practice-IVB (Hospital Pharmacy) Th.	3
PHAR 03622	Pharmacy Practice-VB (Clinical Pharmacy) Th.	3
PHAR 03623	Pharmacy Practice-VB (Clinical Pharmacy) Lab.	1
PHAR 03624 PHAR 03625	Pharmaceutics-IVB (Industrial Pharmacy) Th. Pharmaceutics-IVB (Industrial Pharmacy) Lab.	3
PHAR 03625	Pharmaceutics-VB (Biopharmaceutics &	3
PHAR 03626	Pharmacokinetics) Th.	3
PHAR 03627	Pharmaceutics-VB (Biopharmaceutics	1
PHAR 03628	& Pharmacokinetics) Lab. Pharmaceutics-VIB (Pharmaceutical Quality	3
111/11/00020	Management) Th.	
PHAR 03629	Pharmaceutics-VIB (Pharmaceutical Quality Management) Lab.	1
	Total	19
PHAR 03710	SEMESTER NINE Pharmaceutics-VIIA Pharmaceutical	3
PHAR 03/ 10	Technology) Th.	3
PHAR 03711	Pharmaceutics-VIIA Pharmaceutical	1
PHAR 03712	Technology) Lab. Pharmacy Practice-VIA (Advanced Clinical	3
111/11/00/12	Pharmacy-II) Th.	
	Pharmacy Practice-VIA (Advanced Clinical	
PHAR 03713		1
PHAR 03713 PHAR 03714	Pharmacy-II) Lab.	3
		'
PHAR 03714 PHAR 03716	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th.	3
PHAR 03714	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal	3
PHAR 03714 PHAR 03716	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal	3
PHAR 03714 PHAR 03716 PHAR 03718	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab.	3 3
PHAR 03714 PHAR 03716 PHAR 03718	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab.	3 3
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab.	3 3
PHAR 03714 PHAR 03716 PHAR 03718	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th.	3 3 1 1 18
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th. Pharmaceutics-VIIB Pharmaceutical	3 3 3 1
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719 PHAR 03720	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th. Pharmaceutics-VIIB Pharmaceutical Technology) Lab. Pharmacy Practice-VIB (Advanced Clinical	3 3 1 1 18
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719 PHAR 03720 PHAR 03721 PHAR 03722	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th. Pharmaceutics-VIIB Pharmaceutical Technology) Lab. Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Th.	3 3 3 1 1 18
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719 PHAR 03720 PHAR 03721 PHAR 03722 PHAR 03723	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th. Pharmaceutics-VIIB Pharmaceutical Technology) Lab. Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Th. Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Lab.	3 3 3 1 1 18
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719 PHAR 03720 PHAR 03721 PHAR 03722 PHAR 03723 PHAR 03724	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th. Pharmaceutics-VIIB (Advanced Clinical Pharmacy-II) Th. Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Lab. Pharmacy Practice-VIB (Forensic Pharmacy) Th.	3 3 3 1 1 18 3 1 3
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719 PHAR 03720 PHAR 03721 PHAR 03722 PHAR 03723	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th. Pharmaceutics-VIIB Pharmaceutical Technology) Lab. Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Th. Pharmacy-III) Lab. Pharmacy Practice-VIIB (Forensic Pharmacy) Th. Pharmacy Practice-VIIB (Forensic Pharmacy) Th. Pharmacy Practice-VIIIB (Pharmaceutical	3 3 3 1 1 18
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719 PHAR 03720 PHAR 03721 PHAR 03722 PHAR 03723 PHAR 03724	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th. Pharmaceutics-VIIB Pharmaceutical Technology) Lab. Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Th. Pharmacy-II) Lab. Pharmacy-II) Lab. Pharmacy Practice-VIIB (Forensic Pharmacy) Th. Pharmacy Practice-VIIIB (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVB (Medicinal	3 3 3 1 1 18 3 1 3
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719 PHAR 03720 PHAR 03721 PHAR 03722 PHAR 03722 PHAR 03723	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th. Pharmaceutics-VIIB Pharmaceutical Technology) Lab. Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Th. Pharmacy Practice-VIB (Forensic Pharmacy) Th. Pharmacy Practice-VIIB (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVB (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVB (Medicinal	3 3 3 1 1 18 3 1 3 1 3 3
PHAR 03714 PHAR 03716 PHAR 03718 PHAR 03719 PHAR 03720 PHAR 03721 PHAR 03722 PHAR 03722 PHAR 03724 PHAR 03726 PHAR 03728	Pharmacy-II) Lab. Pharmacy Practice-VIIA (Forensic Pharmacy) Th. Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th. Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab. Total SEMESTER TEN Pharmaceutics-VIIB Pharmaceutical Technology) Th. Pharmaceutics-VIIB Pharmaceutical Technology) Lab. Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Th. Pharmacy Practice-VIB (Forensic Pharmacy) Th. Pharmacy Practice-VIIB (Pharmaceutical Management & Marketing) Th. Pharmaceutical Chemistry-IVB (Medicinal Chemistry) Th.	3 3 3 1 1 18 3 1 3 3 3

 $[\]ensuremath{^*}$ Teaching of Holy Quran will be adjusted in semester 2, 4, 6 and 8

 $[\]ensuremath{^{*}}$ Teaching of Holy Quran carries one credit hour in each semester



Institute of Biochemistry & Biotechnology (IBBT)

BS Biotechnology

Institute of Biochemistry and Biotechnology (IBBt) was established in September 2009 after the up gradation and union of Department of Molecular Biology & Biotechnology and Department of Biochemistry. Currently, IBBT is offering undergraduate BS Biotechnology; BS Biochemistry; and postgraduate (M.Phil and Ph.D) degree programs in the discipline of Biochemistry, Molecular Biology & Biotechnology, and Forensic Sciences, with a strength of more than 600 students.

Establishment of this institution (IBBt) is a landmark that will go a long way to enhance the quality of research, academics and technology development in the field of Biochemistry, Molecular Biology and Genetics of livestock, human and microbes to benefit of the nation. In addition the institute has greatl contribution in UVAS ranking within Pakistan and worldwide.

Our programs geared towards training individuals and arousing interest in the subject, are imperative. The graduates can be employed in various fields like veterinary and agriculture sectors, drug & sugar industries, database development, clinical work, and its management, pharmaceutical areas, research methodology and tools designing in universities and research institutions and many more. Under the supervision of erudite and skilled faculty, graduates will have the qualifications and flexibility to work in a wide range of biotechnology-related areas, both at home and abroad. The Institute is equipped with latest equipment and high tech. laboratories providing the most up-to-date podium for research.

SCHEME OF STUDIES FOR BS BIOTECHNOLOGY

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
BIOT-04101	Biochemistry-I	3(2-1)
BIOC-04102	Organic Chemistry	3(2-1)
SOSC-04103	Functional English	3(3-0)
SOSC-04104	Ideology and Constitution of Pakistan	2(2-0)
STCS-04105	Biomathematics	3(3-0)
ZOOL-04106	Ecology	3(2-1)
	Sub Total	17(14-3)
	SEMESTER TWO	
BIOT-04201	Biochemistry-II	3(2-1)
BIOT-04202	Biosafety and Bioethics	2(2-0)
BIOT-04203	Cell Biology	3(2-1)
SOSC-04204	Expository Writing	
SOSC-04205/	Islamic Studies/	3(3-0)
SOSC-04206	Ethics	2(2-0)
STCS-04207	Biostatistics	3(3-0)
SOSC-04208/	Holy Quran Translation-I/	
SOSC-04209	Ethics-I	1(1-0)
	Sub Total	17(15-2)
	SEMESTER THREE	
BIOT-04301	Principles of Biochemical Engineering	3(2-1)
BIOT-04302	Genetic Resources & Conservation	3(3-0)
BIOT-04303	Classical Genetics	3(3-0)
SOSC-04304	Civics and Community Engagement	2(2-0)
STCS-04305	Applications of Information and Communication Technologies (ICT)	3(2-1)
MICR -04306	Introduction to Cell Culture (Minor)	3(2-1)
	Sub Total	17(14-3)
	SEMESTER FOUR	
BIOT-04401	Molecular Biology	3(3-0)
BIOC-04402	Analytical Chemistry & Instrumentation	3(2-1)
PHYS-04403	Biological Physics	3(3-0)
SOSC-04404	Arts and Humanities	2(2-0)
SOSC-04405	*Sociology	2(2-0)
DEBM-04406	Entrepreneurship	2(2-0)
DEDIVI 01100		
SOSC-04407/	Holy Quran Translation-II/	`
	Holy Quran Translation-II/ Ethics-II	1(1-0)
SOSC-04407/	Holy Quran Translation-II/	

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	
BIOT-04501	Introduction to Biotechnology	3(3-0)
BIOT-04502	Methods in Molecular Biology	3(1-2)
BIOT-04503	Microbial Biotechnology	3(2-1)
BIOT-04504	Bioinformatics	3(1-2)
BIOT-04505	Recombinant DNA Technology	3(2-1)
MICR-04506	Immunology (Minor)	3(3-0)
	Sub Total	18(12-6)
	SEMESTER SIX	
BIOT-04601	Agriculture Biotechnology	3(2-1)
BIOT-04602	Food Biotechnology	3(3-0)
BIOT-04603	Nano Biotechnology	3(3-0)
BIOT-04604	Research Methodology & Skill Enhancement	3(3-0)
DEBM-04605	Principles of Marketing	3(3-0)
SOSC-04606/	Holy Quran Translation-III/	
SOSC-04607	Ethics-III	1(1-0)
MICR-04608	Industrial Microbiology (Minor)	3(2-1)
	Sub Total	19(17-2)
	SEMESTER SEVEN	
BIOT-04701	Health Biotechnology	3(3-0)
BIOT-04702	Seminar	1(1-0)
BIOT-04703	Environment Biotechnology	3(3-0)
BIOT-04704	Genomics & Proteomics	3(3-0)
BIOT-04705	Molecular Diagnostics	3(2-1)
BIOT-04706	Capstone Project	3(0-3)
	Sub Total	16(12-4)
	SEMESTER EIGHT	
BIOT-04801	Animal Biotechnology	3(3-0)
BIOT-04802	Pharmaceutical Biotechnology	3(3-0)
BIOT-04803	Industrial Biotechnology	3(2-1)
	Holy Quran Translation-IV/	
SOSC-04804		
SOSC-04805	Ethics-IV	1(1-0)
	Ethics-IV Internship	3(0-3)
SOSC-04805	Ethics-IV	3(0-3) 13(9-4)

The program is offered as Single Major with One Minor. The Minor is in the discipline of Microbiology.

^{*}This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.





BS Biochemistry

The BS Biochemistry is a program that trains students, with the principles, concepts, techniques and applications involved in Biochemistry. Students will gain an understanding of life, essential bio-molecules required for life, the processes involved in the production of energy, the mechanism for the survival of organisms, through the core courses of this degree program.

Our well-developed curriculum provides ample opportunities for students to learn about the biochemistry of biomolecules, hormones, environment, nutrition, disease, enzymes, plants and metabolism of various biomolecules. Practical courses in the degree program are included to develop the practical approach among students.

SCHEME OF STUDIES FOR BS BIOCHEMISTRY

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
BIOC-14101	Organic Chemistry	3(2-1)
BIOC-14102	Introductory Biochemistry	3(2-1)
STCS-14103	Biomathematics	3(3-0)
ZOOL-14104	Ecology	3(2-1)
SOSC-14105	Functional English	3(3-0)
SOSC-14106	Ideology and Constitution of Pakistan	2(2-0)
	Sub Total	17(14-3)
	SEMESTER TWO	
BIOC-14201	Inorganic Chemistry	3(2-1)
BIOC-14202	Carbohydrates & Lipids	3(2-1)
BIOC-14203	Cell Biology	3(2-1)
SOSC-14204	Expository Writing	3(3-0)
SOSC-14205/	Islamic Studies/	, ,
SOSC-14206	Ethics	2(2-0)
STCS-14207	Biostatistics	3(3-0)
SOSC-14208/	Holy Quran Translation-I /	. ,
SOSC-14209	Ethics-I	1(1-0)
	Sub Total	18(15-3)
	SEMESTER THREE	
BIOC-14301	Physical Chemistry	3(2-1)
BIOC-14301 BIOC-14302	Physical Chemistry Protein and Nucleic acid	3(2-1) 3(2-1)
	Physical Chemistry Protein and Nucleic acid Genetics	3(2-1) 3(2-1) 3(3-0)
BIOC-14302	Protein and Nucleic acid Genetics Enzymology	3(2-1)
BIOC-14302 BIOC-14303	Protein and Nucleic acid Genetics	3(2-1) 3(3-0)
BIOC-14302 BIOC-14303 BIOC-14304	Protein and Nucleic acid Genetics Enzymology	3(2-1) 3(3-0) 3(2-1)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305	Protein and Nucleic acid Genetics Enzymology Human Physiology	3(2-1) 3(3-0) 3(2-1) 3(2-1)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement Applications of Information and Communication Technologies (ICT) Sub Total SEMESTER FOUR	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0) 3(2-1)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306 STCS-14307	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement Applications of Information and Communication Technologies (ICT) Sub Total SEMESTER FOUR Analytical chemistry	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0) 3(2-1) 20(15-5)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306 STCS-14307	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement Applications of Information and Communication Technologies (ICT) Sub Total SEMESTER FOUR Analytical chemistry Microbiology	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0) 3(2-1) 20(15-5)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306 STCS-14307	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement Applications of Information and Communication Technologies (ICT) Sub Total SEMESTER FOUR Analytical chemistry	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0) 3(2-1) 20(15-5)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306 STCS-14307 BIOC-14401 MICR-14402	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement Applications of Information and Communication Technologies (ICT) Sub Total SEMESTER FOUR Analytical chemistry Microbiology Arts and Humanities *Sociology	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0) 3(2-1) 20(15-5) 3(2-1) 3(2-1) 2(2-0) 2(2-0)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306 STCS-14307 BIOC-14401 MICR-14402 SOSC-14403	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement Applications of Information and Communication Technologies (ICT) Sub Total SEMESTER FOUR Analytical chemistry Microbiology Arts and Humanities *Sociology Entrepreneurship	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0) 3(2-1) 20(15-5) 3(2-1) 3(2-1) 2(2-0)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306 STCS-14307 BIOC-14401 MICR-14402 SOSC-14403 SOSC-14404	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement Applications of Information and Communication Technologies (ICT) Sub Total SEMESTER FOUR Analytical chemistry Microbiology Arts and Humanities *Sociology	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0) 3(2-1) 20(15-5) 3(2-1) 3(2-1) 2(2-0) 2(2-0)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306 STCS-14307 BIOC-14401 MICR-14402 SOSC-14403 SOSC-14404 DEBM-14405	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement Applications of Information and Communication Technologies (ICT) Sub Total SEMESTER FOUR Analytical chemistry Microbiology Arts and Humanities *Sociology Entrepreneurship	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0) 3(2-1) 20(15-5) 3(2-1) 3(2-1) 2(2-0) 2(2-0)
BIOC-14302 BIOC-14303 BIOC-14304 PHYS-14305 SOSC-14306 STCS-14307 BIOC-14401 MICR-14402 SOSC-14403 SOSC-14404 DEBM-14405 SOSC-14406/	Protein and Nucleic acid Genetics Enzymology Human Physiology Civics and Community Engagement Applications of Information and Communication Technologies (ICT) Sub Total SEMESTER FOUR Analytical chemistry Microbiology Arts and Humanities *Sociology Entrepreneurship Holy Quran Translation-II/	3(2-1) 3(3-0) 3(2-1) 3(2-1) 2(2-0) 3(2-1) 20(15-5) 3(2-1) 3(2-1) 2(2-0) 2(2-0) 2(2-0)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	
BIOC-14501	Metabolism-I	3(3-0)
BIOC-14502	Bioinformatics	3(1-2)
MICR-14503	Immunology	3(3-0)
BIOT-14504	Methods in Molecular Biology (Minor)	3(1-2)
BIOT-14505	Introduction to Biotechnology (Minor)	3(3-0)
BIOT-14506	Recombinant DNA technology (Minor)	3(2-1)
	Sub Total	18(13-5)
	SEMESTER SIX	
BIOC-14601	Clinical Biochemistry	3(2-1)
BIOC-14602	Nutritional Biochemistry	3(2-1)
BIOC-14603	Industrial Biochemistry	3(2-1)
BIOC-14604	Biochemical Techniques	3(1-2)
BIOC-14605	Plant Biochemistry	3(2-1)
BIOC-14606	Metabolism-II	3(2-1)
SOSC-14607/	Holy Quran Translation-III/	
SOSC-14608	Ethics-III	1(1-0)
	Sub Total	19(12-7)
	SEMESTER SEVEN	
BIOC-14701	Environmental Biochemistry	3(3-0)
BIOC-14702	Bio-membranes & Cell Signaling	3(3-0)
BIOC-14703	Bioenergetics	3(3-0)
BIOC-14704	Proteomics	3(3-0)
NUTD-14705	Vitamins in Human Nutrition	3(2-1)
BIOC-14706	Capstone Project	3(0-3)
	Sub Total	18(14-4)
	SEMESTER EIGHT	
BIOC-14801	Current Trends in Biochemistry	3(3-0)
BIOC-14802	Research Planning & Scientific Writing	3(3-0)
BIOC-14803	Internship	3(0-3)
SOSC-14804/	Holy Quran Translation-IV/	
SOSC-14805	Ethics-IV	1(1-0)
	Sub Total	10(7-3)
	Grand Total	

The program is offered as Single Major with One Minor. The Minor is in the discipline of Microbiology.

^{*}This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.



Department of Environmental Sciences

BS Environmental Sciences

"Environment Friendly" is not a politicized slogan now-a-days rather is a need of the world. Most of the changes that occurred on earth at the beginning of the 21st century are unprecedented in their rates and scope. There is a growing concern that the environmental issues are neither ecological problem nor economic or social rather they are a combination of all three. People who are in the economic or industrial race are neglecting the harmful impacts of their activities. The provision of clean air and water, ensuring the security and distribution of adequate food supplies, the development of renewable sources of energy, the maintenance of global biodiversity and the prevention of diseases of human and animals are just some of the many priorities of environmentalists as the world's population continues to grow and aspire to achieve higher standards of living. These changes in biodiversity and atmospheric composition, and the use of agricultural land for other purposes have important effects on the global environment and subsequently pose challenges to the scientists and the policy makers.

To prevent continued environmental degradation and the decline of human society, a strong interaction between life and the environment is essential. This is achieved through an integrated, holistic approach encompassing education and research activities. Therefore, the Department of Environmental Sciences integrates the biological, physical, and social sciences to provide basic and advanced education in these fields. The Department of Environmental Sciences is



also committed to develop critical analytical skills and ability to conduct highest quality research ranging from molecular to global scales and within interlinked human social systems. Department of Environmental Sciences develops human resource through up to date Environmental Sciences education and research. Main emphasis is to conduct internationally recognized basic and applied research and provide education of high

international standards to build a highly skilled human resource that will contribute towards national and international decision-making and management of environmental and health risks. The Department also aims to advise the government/non-government organizations on environmental policy for sustainable future.

SCHEME OF STUDIES FOR BS ENVIRONMENTAL SCIENCES

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
ENSC 09101	Introduction to Environmental Science	3(3-0)
ANAT 09102	Basic Biology	3(2-1)
STCS 09103	Applications of Information and Communication Technologies (ICT)	3(2-1)
STCS 09104	Biomathematics	3(3-0)
SOSC 09105	Functional English	3(3-0)
SOSC 09106	Islamic Studies /	
	Ethics	2(2-0)
SOSC 09107/	Holy Quran translation-I/	
SOSC 09108	Ethics-I	1(1-0)
	Sub Total	18(16-2)
	SEMESTER TWO	
ENSC 09201	Introduction to Earth Science	3(2-1)
ENSC 09202	Environmental Pollution	3(3-0)
BIOC 09203	Basic Chemistry	3(2-1)
STCS 09204	Biostatistics	3(3-0)
DEBM 09205	Entrepreneurship	2(2-0)
SOSC 09206	Expository Writing	3(3-0)
SOSC 09207	Ideology and Constitution of Pakistan	2(2-0)
	Sub Total	19(17-2)
	SEMESTER THREE	
BIOC 09301	Environmental Chemistry	3(2-1)
ENSC 09302	Environmental Physics	3(2-1)
DEBM 09303	Introductory Economics	3(3-0)
PHYS 09304	Environmental Physiology	3(2-1)
SOSC 09305	Arts and Humanities	2(2-0)
SOSC 09306	* Sociology	2(2-0)
SOSC 09307/	Holy Quran translation-II/	
SOSC 09308	Ethics-II	1(1-0)
	Sub Total	17(14-3)
	SEMESTER FOUR	
ENSC 09401	Environmental Laws and Policies	3(3-0)
MICR 09402	Environmental Microbiology	3(2-1)
ENSC 09403	Environmental Monitoring	3(2-1)
ENSC 09404	Climatology	3(3-0)
PHRM 09405	Environmental Toxicology	3(3-0)
ENSC 09406	Fundamentals of Ecology	3(3-0)
SOSC 09407	Civics and Community Engagement	2(2-0)
	Sub Total	20(18-2)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	1104.0
ENSC 09501	Applied Ecology	3(2-1)
ENSC 09502	Environmental Profile of Pakistan	3(3-0)
BIOT 04503	Methods in Molecular Biology	3(1-2)
DEBM 09504	Environmental Economics	3(3-0)
ENSC 09505	Analytical Techniques in Environmental Science	3(1-2)
ENSC 09506	Soil and Environment	3(3-0)
SOSC 09507/	Holy Quran translation-III/	
SOSC 09508	Ethics-III	1(1-0)
	Sub Total	19(14-5)
	SEMESTER SIX	
ENSC 09601	Climate Change	3(3-0)
ENSC 09602	GIS and Remote Sensing	3(1-2)
BIOT 04603	Agricultural Biotechnology	3(2-1)
ENSC 09604	Environmental Management Systems	3(3-0)
ENSC 09605	Biodiversity and Conservation	3(3-0)
ENSC 09606	Animal Waste Management	3(3-0)
ENSC 09607	Health and Environment	3(3-0)
	Sub Total	21(18-3)
	SEMESTER SEVEN	
ENSC 09701	Natural Resource Management	3(3-0)
ENSC 09702	Environmental Impact Assessment	3(3-0)
BIOT 04703	Environmental Biotechnology	3(3-0)
ENSC 09704	Research Methods in Environmental Science	3(3-0)
ENSC 09705	Energy and Environment	3(3-0)
ENSC 09706	Disaster Management and Seminar	3(2-1)
SOSC 09707/	Holy Quran translation-IV/	
SOSC 09708	Ethics-IV	1(1-0)
	Sub Total	19(18-1
	SEMESTER EIGHT	
ENSC 09801	Pollution Control Technologies	3(2-1)
ENSC 09802	Capstone Project	3(0-3)
BIOT 04803	Industrial Biotechnology	3(2-1)
ENSC 09804	Internship	3(0-3)
	Sub Total	
	Grand Total	145(119-26

The program is offered as Single Major with one Minor. The Minor is in the discipline of Biotechnology.

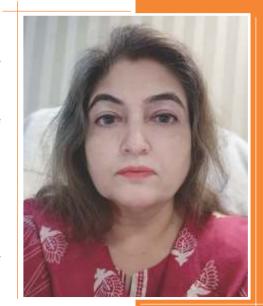
^{*}This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.

FACULTY OF ANIMAL PRODUCTION & TECHNOLOGY (FAPT)

BS Poultry Science, BS Dairy Technology WORLD SVAO

Dean's Message

Livestock and poultry sector is a major component of Pakistan economy accounting for 11.2 % of the national GDP and 60.5 % of agriculture. This sector meets the domestic needs of milk, meat and eggs. More than 8 million families are involved in raising livestock. Animal production activities important source of employment for rural people and play a vital role in poverty alleviation. This sector has a great potential for export earnings as well. The Faculty of Animal Production & Technology has six Departments i.e. Livestock Production, Poultry Production, Animal Nutrition, Dairy Technology, Meat Science and Technology, Leather & Fiber Technology. Our departments are keeping pace with the requirements of allied sectors by fulfilling the needs of human resource, development of new technologies and conducting problem oriented research. The faculty is



offering two four years professional degree programs, i.e. BS Poultry Science and BS Dairy Technology. Faculty also offers undergraduate courses for the Degree of Doctor of Veterinary Medicine. Different short training & diploma courses are also being offered for the farmers and stake holders in the field of livestock production, poultry production and animal products technology. The faculty has livestock and poultry farms for training and research. Different small ruminants' breeds, local and exotic dairy breeds of large ruminants and different poultry breeds are being maintained at these farms. The newly established central lab complex at Ravi campus has state of the art facilities for wide range of laboratory analyses. Our foreign qualified faculty members are well recognized for the quality of their classroom instructions and applied research. I welcome the students getting admission in different undergraduate degree programs of this University. I am confident that the students will enjoy excellent environment for learning and skills development for their future career. I wish the students best of luck and success in all their future.

Prof. Dr. Saima Dean FAP& T

FACULTY OF ANIMAL PRODUCTION & TECHNOLOGY

Prof. Dr. Saima, Ph.D.

DEPARTMENT OF ANIMAL NUTRITION

Chairman / Associate Professor

Dr. Naveed-ul-Haque, Ph.D.

Professor

Prof. Dr. Saima, Ph.D.

Associate Professors

Dr. Saeed Ahmad, Ph.D.

Dr. Muhammad Afzal Rashid, Ph.D

Dr. Shafqat Nawaz Qiasrani, Ph.D.

Assistant Professor

Dr. Ehsan Ullah, Ph.D.

Lecturers

Dr. Gazanfar Ali Chisti, Ph.D.

Mr. Mubashar Ali, Ph.D. (Scholar)

Mr.Usman Ali, Ph.D. (Scholar) (Visiting)

Mr. Shahbaz Zafar, Ph.D. (Scholar) (Visiting)

DEPARTMENT OF DAIRY TECHNOLOGY Chairperson / Associate Professor

Dr. Saima Inayat, Ph.D.

Associate Professor

Dr. Muhammad Nadeem. Ph.D.

Assistant Professor

Dr. Nabila Gulzar, Ph.D.

Dr. Ishtiaque Ahmed, Ph.D.

Lecturers

Dr. Muhammad Junaid, Ph.D.

Eng. Saqib Manzoor, Ph.D. (Scholar)

Mr. Asim Ikram, Ph.D. (Scholar) (On Study Leave)

Ms. Ayesha Ikram, Ph.D. (Scholar) (Visiting)

Mr. Sheraz Anwar, Ph.D. (Scholar) (Visiting)

DEPARTMENT OF LIVESTOCK MANAGEMENT

Chairman/Associate Professor

Dr. Muhammad Qamar Shahid. Ph.D.

Associate Professor

Dr. Nisar Ahmad, Ph.D

Assistant Professors

Dr. Imran Mohsin, Ph.D.

Dr. Hifz- ul- Rehman, Ph.D.

Dr. Muhammad Saadullah. Ph.D.

Lecturer

Mr. Nasir Ali, M. Phil

DEPARTMENT OF ANIMAL BREEDING AND GENETICS

Chairperson / Associate Professor

Dr. Atia Basheer, Ph.D.

Associate Professors

Dr. Imran Zahoor, Ph.D.

Dr. Haiba Kaul, Ph.D.

Assistant Professors

Dr. Bilal Bin Majeed, Ph.D.

Dr. Hamid Mustafa, Ph.D.

Lecturers

Dr. Muhammad Dawood, Ph.D.

Dr. Asad Ali. Ph.D.

Ms. Fakhar un Nisa, M.Phil, Ph.D. (On Study leave)

DEPARTMENT OF POULTRY PRODUCTION

Chairman / Associate Professor

Dr. Shahid Mehmood, Ph.D.

Associate Professor

Dr. Jibran Hussain. Ph.D.

Assistant Professor

Mr. Shahid Javaid, M.Sc., Dip IT

Dr. Sohail Ahmad, Ph.D.

Dr. Faisal Hussnain, Ph.D.

Dr. Muhammad Usman, Ph.D.

Dr. Muhammad Shabir Shaheen, Ph.D.

Mr. Muhammad Waqas, M.Phil (On study leave)

Visiting Lecturer

Mr. Hafiz Rao Abdul Latif, M.Phil

Veterinary Officer

Dr. Abd Ur Rehman, M.Phil, (On Study leave)
DEPARTMENT OF MEAT SCIENCE AND TECHNOLOGY

Chairman/Associate Professor

Dr. M. Hayat Jaspal, Ph.D

Assistant Professor

Dr. Sher Ali. Ph.D

Dr. Kashif Nauman, Ph.D

Lecturers

Mr. Jamal Nasir, Ph.D. (Scholar) (On study leave)

Mr. Iftikhar Hussain Badar, Ph.D. (Scholar) (On study leave)

Mr. Bilal Asghar, Ph.D. (Scholar) (On study leave)

Mr. Adeel Manzoor, Ph.D. (Scholar) (On study leave)

DEPARTMENT OF LEATHER AND FIBER TECHNOLOGY

Lecturer / Officer Incharge

Mr. Sadaqat Ali Chattha, Ph.D. (Scholar) (On study leave)



CENTRAL LABORATORY COMPLEX (CLC) RAVI CAMPUS, PATTOKI



Dairy Plant, Pattoki Campus, UVAS





Department of Poultry Production

BS Poultry Science

Poultry industry is 2nd largest agro-based industry of Pakistan. Poultry Production sector has been playing vital role in bridging the gap between supply and demand of animal protein foods for its ever increasing human population.

We produce professionals capable of tackling problems in poultry sector related to breeding, genetics, management, nutrition, processing, marketing and poultry waste management. Students trained through this degree program are successfully serving many national and international poultry firms and are very highly paid. Job attaining rate of the professionals trained through this degree program is above 99%. Recently, Department of Poultry Production has signed MoU with Ibrahim Poultry Traders regarding internship and jobs for the students. The job opportunities for graduated student include poultry farms, feed mills, hatcheries, processing plants, marketing companies. The degree furnish student completely to start his/her own poultry business.



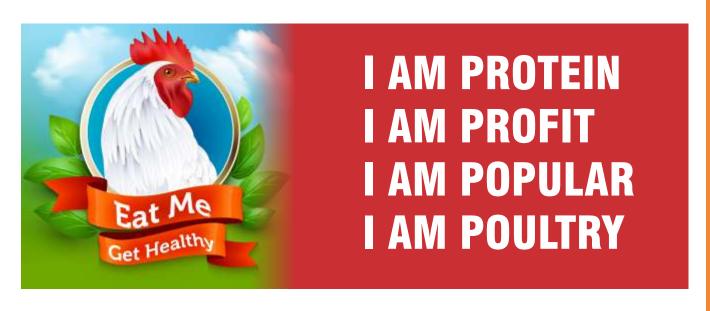
SCHEME OF STUDIES FOR BS POULTRY SCIENCE

		Credit
Course No.	Course Title	Hours
	SEMESTER ONE	
POSC-07101	Introduction to Poultry Science	4(2-2)
POSC-07102	Biology of the Fowl	3(2-1)
SOSC-07103	Functional English	3(3-0)
STCS-07104	Biomathematics	3(3-0)
STCS-07105	Applications of Information and Communication Technologies (ICT)	3(2-1)
SOSC-07106/	Islamic Studies/	
SOSC-07107	Ethics	2(2-0)
SOSC-07108	Holy Quran Translation-I/	
SOSC-07109	Ethics-I	1(1-0)
	Sub Total	19(15-4)
	SEMESTER TWO	
POSC-07201	Avian Embryology	3(2-1)
BIOC-07202	Principles of Biochemistry	3(2-1)
PHYS-07203	Avian Anatomy and Physiology	3(2-1)
ZOOL-07204	Ecology	3(2-1)
SOSC-07205	Expository Writing	3(3-0)
DEBM-07206	Entrepreneurship	2(2-0)
SOSC-07207	Ideology and Constitution of Pakistan	2(2-0)
	Sub Total	19(15-4)
	SEMESTER THREE	
POSC-07301	Game Bird Production	3(2-1)
NUTR-07302	Fundamentals of Poultry Nutrition	3(2-1)
ANBG-07303	Introduction to Poultry Genetics	3(2-1)
STCS-07304	Biostatistics	3(3-0)
SOSC-07305	Sociology	2(2-0)
SOSC-07306	Arts and Humanities	2(2-0)
SOSC-07307/	*Holy Quran Translation-II/	
SOSC-07308	Ethics-II	1(1-0)
	Sub Total	17(14-3)
	SEMESTER FOUR	
ANBG-07401	Population Genetics	3(2-1)
NUTR-07402	Nutrition of Table Poultry	3(2-1)
POSC-07403	Broiler Production and Management	4(2-2)
POSC-07404	Poultry Behaviour and Welfare	3(2-1)
POSC-07405	Poultry Processing and Preservation Technology	3(2-1)
SOSC-07406	Civics and Community Engagement	2(2-0)
	Sub Total	18(12-6)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	
NUTR-07501	Nutrition of Laying Birds	3(2-1)
POSC-07502	Layer Production and Management	3(1-2)
POSC-07503	Egg Products Technology	3(1-2)
ANBG-07504	Molecular Genetics and Biotechnology	3(2-1)
DEBM-07505	Poultry Marketing and Risk Management	3(3-0)
SOSC-07506/	Holy Quran Translation-III/	
SOSC-07507	Ethics-III	1(1-0)
	Sub Total	16(10-6)
	SEMESTER SIX	
ANBG-07601	Applied Poultry Genetics	3(2-1)
POSC-07602	Poultry Housing and Environmental Management	3(2-1)
POSC-07603	Management of Parent Stocks	3(1-2)
POSC-07604	Poultry Farm Engineering and Construction	3(2-1)
NUTR-07605	Feed Formulation and Processing Technology	3(1-2)
MST-07606	Further Poultry Processing	2(1-1)
	Sub Total	17(9-8)
	SEMESTER SEVEN	
POSC-07701	Incubation Principles and Hatchery Management	3(2-1)
POSC-07702	Computerized Poultry Record Keeping	3(2-1)
POSC-07703	Rural Poultry Production	2(1-1)
POSC-07704	Poultry Health Management	3(2-1)
EPPH-07705	Poultry Hygiene and Diseases Prevention	4(2-2)
SOSC-07706/	Holy Quran Translation-IV/	
SOSC-07707	Ethics-IV	1(1-0)
	Sub Total	16(10-6)
	SEMESTER EIGHT	
POSC-07801	Quality Control Management in Poultry Operations	2(1-1)
POSC-07802	Internship	3(0-3)
POSC-07803	Capstone Project	3(0-3)
	Sub Total	8(1-7)
	Grand Total	130(86-44)

The program is offered as Single Major.

*This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.





Department of Dairy Technology

BS Dairy Technology

This Department started when the College of Veterinary Sciences was upgraded to University of Veterinary and Animal Sciences Lahore. After the up gradation of CVS to UVAS dairy section is changed to the Department of Animal Products Technology. Department of Animal Product Technology has been restructured into three independent Departments namely, Department of Dairy Technology, Department of Meat Science & Technology and Department of Leather and Fibre Technology

The degree program in Dairy Technology started with the following aims and objectives:

- o To impart advance knowledge about milk processing as a major discipline in the field of Dairy Technology.
- To equip the students with recent knowledge and practical skills for suitable planning, state of art processing / preservation and dairy products manufacturing.
- o Development of appropriate technologies for the value added dairy products meeting WTO standards.

SCHEME OF STUDIES FOR BS DAIRY TECHNOLOGY

Course No.	Course Title	Credit
Course No.		Hours
	SEMESTER ONE	
DTEC-06101	Introduction to Dairy Technology	3(2-1)
DTEC-06102	Introduction to Food and Nutrition	3(2-1)
STCS-06103	Applications of Information and Communication Technologies(ICT)	3(2-1)
SOSC-06104	Functional English	3(3-0)
STCS-06105	Biomathematics	3(3-0)
SOSC-06106/	Islamic Studies /	
SOSC-06107	Ethics	2(2-0)
SOSC-06108/	Holy Quran Translation-I/	
SOSC-06109	Ethics-I	1(1-0)
	Sub Total	18(15-3)
	SEMESTER TWO	
DTEC-06201	Chemistry of Dairy Products	3(2-1)
LPRO-06202	Introduction to Livestock Production	3(2-1)
BIOC-06203	Biochemistry	3(2-1)
SOSC-06204	Expository Writing	3(3-0)
SOSC-06205	Ideology and Constitution of Pakistan	2(2-0)
DEBM-06206	Entrepreneurship	2(2-0)
	Sub Total	16(13-3)
	SEMESTER THREE	
DTEC-06301	Fluid Mechanics	3(2-1)
DTEC-06302	Introduction to Dairy Microbiology	3(2-1)
DTEC-06303	Milk Processing Technology	3(2-1)
LPRO-06304	Principles of Milk Production and Procurement	3(2-1)
SOSC-06305	Arts and Humanities	2(2-0)
STCS-06306	*Biostatistics	3(3-0)
SOSC-06307	Sociology	2(2-0)
SOSC-06308/	Holy Quran Translation-II /	
SOSC-06309	Ethics-II	1(1-0)
	Sub Total	17(14-3)
	SEMESTER FOUR	
DTEC-06401	Thermodynamics	3(2-1)
DTEC-06402	Food and Industrial Microbiology	3(2-1)
DTEC-06403	Food Processing and Preservation	4(3-1)
DTEC-06404	Traditional Dairy Products	3(2-1)
LPRO-06405	Introduction to Lactation Biology	3(2-1)
SOSC-06406	Civics and Community Engagement	2(2-0)
	Sub Total	18(13-5)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	1104110
DTEC-06501	Heat Transfer and Refrigeration	4(3-1)
DTEC-06502	Fermented Dairy Products	4(3-1)
DTEC-06503	Fat Rich Dairy Products	3(2-1)
DTEC-06504	Food Safety and Toxicology	3(2-1)
DEBM-06505	Marketing Management and International Trade	3(3-0)
SOSC-06506/	Holy Quran Translation-III /	
SOSC-06507	Ethics-III	1(1-0)
	Sub Total	18(14-4)
	SEMESTER SIX	
DTEC-06601	Dairy Plant Management and Sanitation	3(2-1)
DTEC-06602	Microbiology of Starter Culture	3(2-1)
DTEC-06603	Food Engineering	3(2-1)
DTEC-06604	Food Packaging	3(2-1)
DTEC-06605	By – Products Technology	2(1-1)
DTEC-06606	Food Laws and Food Safety Management Systems	3(3-0)
	Sub Total	17(12-5)
	SEMESTER SEVEN	
DTEC-06701	Ice Cream and Frozen Desserts	3(2-1)
DTEC-06702	Condensed and Dried Milk Products	3(2-1)
DTEC-06703	Sensory Evaluation of Food Products	3(2-1)
DTEC-06704	Dairy Plant Machinery and Layout	3(2-1)
DTEC-06705	Quality Assurance in Food Industry	3(2-1)
SOSC-06706/	Holy Quran Translation-IV/	
SOSC-06707	Ethics-IV	1(1-0)
	Sub Total	16(11-5)
	SEMESTER EIGHT	
DEBM-06801	Dairy Supply Chain Management	2(2-0)
DTEC-06802	Internship	3(0-3)
DTEC-06803	Capstone Project	3(0-3)
	Sub Total	8(2-6)
	Grand Total	131(96-35)

The program is offered as Single Major.

*This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.



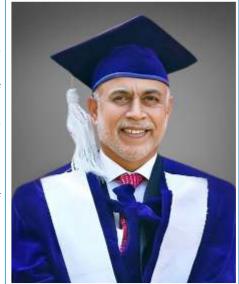
FACULTY OF FISHERIES AND WILDLIFE (FF&W)

B Ho BS Zoology, BS Fisheries & Aquaculture, BS Biological Sciences, BS Botany G

Dean's Message

Welcome to the Faculty of Fisheries & Wildlife, University of Veterinary & Animal Sciences, Lahore. This faculty comprises a family of highly motivated academicians, supporting staff and students who are passionate towards the advancement of knowledge. The Faculty of Fisheries & Wildlife accommodates education and research on science and technology relevant to nature and human activities. The faculty possesses three departments namely Fisheries & Aquaculture, Wildlife & Ecology and Biological Sciences.

The faculty has developed its capability in both manpower production and basic and applied research and upholds the vision to be a center of academic excellence in the fields of Fisheries, Aquaculture, Zoology, Biodiversity, Wildlife Management, Botany, Biological Sciences and Conservation Biology with a mission "Linking Science to Management". Excellence in academic, research, innovation and capacity building has always been our priority. In particular, we have faculty members who are



experts in their fields and provide quality education and innovative research. The Faculty is dedicated to generating and disseminating knowledge for the stewardship of natural and managed environments (aquatic and terrestrial) and the use of their products and services through teaching, research, and professional public outreach. Its Bachelor's (BS Fisheries & Aquaculture, BS Zoology, BS Biological Sciences and BS Botany), Masters (M.Phil. Fisheries & Aquaculture, M.Phil. Wildlife & Ecology, M.Phil. Zoology and M.Phil. Botany) and doctoral programs (Ph.D. Fisheries & Aquaculture, Ph.D. Wildlife & Ecology and Ph.D. Zoology) provide enriched education and research. We accomplish this through a combination of quality education, scholarly research, extension education and public outreach programs.

The faculty has been affiliated with national and International Institutions: Fisheries Research & Training Institute, Manawan, Lahore; Lahore Zoo; Fisheries Development Board; Punjab Wildlife Department; Veterinary Research Institute, Lahore; WWF Pakistan and Pakistan Fish Industry for research, teaching, and practical training. The Faculty has developed international linkages and collaborations with World Fish Center, Malaysia; American Fisheries Association; Aqua Wales; University of Wales, Swansea; Newcastle University, UK; Purdue University, Fort Wayne, USA; Ohio State University, USA; School of Biological Sciences, Scottish Fish Immunology Lab, University of Aberdeen, UK; Institute of Aquaculture, University of Stirling, Scotland; University of Laval, Quebec, Canada; Protos-Biotech, Mare Nostrum, Norway; University of Ataturk, Erzurum, Turkey; Asian Institute of Technology, Thailand; College of Veterinary Medicine, Chungnam National University, South Korea; School of Agriculture and Aquaculture, Tra Vinh University, Vietnam; International Union for Conservation of Nature; Pearl River Fisheries Research Institute, Chinese Academy of Fishery Sciences, China; Fujian Institute of Oceanography, Xiamen, China; and US Soybean Export Corporation, USA.

As we strive to be the most productive and vibrant faculty in Pakistan, our faculty members strive to provide excellent quality education. Our success during the past years was a result of hard work by our dedicated faculty members and students. Therefore, we have every reason to be confident that the coming years will bring a renewed commitment to the challenges and opportunities that lie ahead.

I congratulate you on your admission to this highly prestigious and highly ranked institute of the nation.

Prof. Dr. Nasim Ahmad, (S.I.) Dean, FF&W

FACULTY OF FISHERIES & WILDLIFE

DEPARTMENT OF FISHERIES & AQUACULTURE

Chairman

Dr. Muhammad Hafeez-ur-Rehman, Ph.D.

Professor

Prof. Dr. Hamda Azmat, Ph.D.

Assistant Professors

Dr. Sumaira Abbas, Ph.D.

Dr. Farzana Abbas, Ph.D.

Dr. Mahroze Fatima. Ph.D.

Dr. M. Rashid, Ph.D. (TTS)

Lecturer

Mr. Muhammad Akmal, Mphil

DEPARTMENT OF WILDLIFE AND ECOLOGY

Chairman / Professor

Prof. Dr. Arshad Javid, Ph.D.

Professors

Dr. Khalid Mehmood Anjum, Ph.D

Dr. Shahzad Ali, Ph.D

Dr. Sidra Safdar, Ph.D.

Assistant Professors

Dr. Asia Iqbal, Ph.D.

Dr. Syed Mohsin Bukhari, Ph.D

Dr. Rehan UL Haq, Ph.D

Dr. Waqas Ali, Ph.D

Lecturers

Mr. Syed Ghulam Mohayud Din Hashmi, M. Phil.

Mr. Irshad Hussain, M.Phil

DEPARTMENT OF BIOLOGICAL SCIENCES

Chairperson

Dr. Mubashrah Munir, Ph.D.

Associate Professor

Dr. Abdul Razzag, Ph.D.

Assistant Professors

Dr. Beenish Aftab, Ph.D.

Dr. Sehrish Sadia, Ph.D.

Dr. Aamna Ishaq, Ph.D.

Lecturer

Mrs Anam Iftikhar, M.Phil

Ms. Fatima Kabir, M.Phil

Department of Wildlife and Ecology

BS Zoology

One undergraduate program BS Zoology is offered under the Faculty of Fisheries and Wildlife. The discipline of Zoology meets the need of trained manpower in a vast basic and interdisciplinary framework concerning animal sciences. The department has earned international recognition for academic excellence and prominence in various fields of research like cell biology, molecular biology, physiology, developmental biology, entomology, microbiology, paleontology, parasitology, environmental biotechnology, toxicology, fisheries, wildlife etc. Zoology graduates after Master or BS 4 year degree have diverse experience and competence to serve health, agriculture, Fisheries, Biotechnology, Wildlife, environment and other relevant sectors including various research organizations.



SCHEME OF STUDIES FOR BS ZOOLOGY

Course No.	Course Title	Credit Hours
	SEMESTER ONE	Tieure
ZOOL-08101	Animal Diversity-I (Invertebrates)	4(3-1)
ZOOL-08102	Cell Biology	3(2-1)
BTNY-08103	Diversity of Plants	3(2-1)
SOSC-08104	Functional English	3(3-0)
SOSC-08105	Ideology and Constitution of Pakistan	2(2-0)
CHEM-08106	Physical Chemistry	3(2-1)
SOSC-08107/	Holy Quran Translation-I/	
SOSC-08108	Ethics-I	1(1-0)
	Sub Total	18(15-3)
	SEMESTER TWO	
ZOOL-08201	Animal Diversity-II (Chordates)	4(3-1)
BTNY-08202	Plant Systematics, Anatomy and Development	3(2-1)
SOSC-08203	Expository Writing	3(3-0)
CHEM-08204	Inorganic and Organic Chemistry	3(2-1)
STCS-08205	Biomathematics	3(3-0)
SOSC-08206/	Islamic Studies/	
SOSC-08207	Ethics	2(2-0)
	Sub Total	18(15-3)
	SEMESTER THREE	
ZOOL-08301	Economic Zoology	3(2-1)
ZOOL-08302	Animal Form and Function-I	4(3-1)
BTNY-08303	Plant Physiology and Ecology	3(2-1)
SOSC-08304	Civics and Community Engagement	2(2-0)
DEBM-08305	Entrepreneurship	2(2-0)
SOSC-08306/	Holy Quran Translation-II/	4/4.6
SOSC-08307	Ethics-II	1(1-0)
	Sub Total	15(12-3)
7001 00404	SEMESTER FOUR	4(0.4)
ZOOL-08401	Animal Form and Function-II	4(3-1)
BTNY-08402	Biodiversity and Conservation	4(3-1)
SOSC-08403	Sociology	2(2-0)
STCS-08404	Applications of Information and Communication Technologies (ICT)	3(2-1)
SOSC-08405 STCS-08406	Arts and Humanities *Biostatistics	2(2-0)
3103-08406		3(3-0)
	Sub Total	18(15-3)

0 N	- T:u	Credit
Course No.	Course Title	Hours
	SEMESTER FIVE	
ZOOL-08501	Biological Techniques	3(1-2)
ZOOL-08502	Physiology	4(3-1)
ZOOL-08503	Ecology	3(2-1)
ZOOL-08504	Evolution	2(2-0)
BIOC-08505	General Biochemistry	3(2-1)
SOSC-08506/	Holy Quran Translation-III/	
SOSC-08507	Ethics-III	1(1-0)
	Sub Total	16(11-5)
	SEMESTER SIX	
ZOOL-08601	Research Methodology	2(2-0)
ZOOL-08602	Principles of Systematics	3(2-1)
ZOOL-08603	Developmental	4(3-1)
ZOOL-08604	Biology	4(3-1)
ZOOL-08605	GeneticsWildlife	3(2-1)
	Sub Total	16(12-4)
	SEMESTER SEVEN	
ZOOL-08701	Bioinformatics	3(1-2)
ZOOL-08702	Animal Behavior	3(3-0)
ZOOL-08703	Fish Culture	3(2-1)
ZOOL-08704	General Microbiology	4(3-1)
ZOOL-08705	Molecular Biology	3(2-1)
ZOOL-08706/	Holy Quran Translation-IV/	
SOSC-08707	Ethics-IV	1(1-0)
	Sub Total	16(11-5)
	SEMESTER EIGHT	
ZOOL-08801	Limnology	3(2-1)
ZOOL-08802	Biology and Control of Vertebrate Pests	3(2-1)
ZOOL-08803	Zoogeography & Paleontology	3(2-1)
ZOOL-08804	Internship	3(0-3)
ZOOL-08805	Capstone Project	3(0-3)
	Sub Total	15(6-9)
	Grand Total	134(98-36)

The program is offered as Single Major.

*This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.





Department of Fisheries and Aquaculture

BS Fisheries and Aquaculture

Department of Fisheries and Aquaculture has stat of the art facilities comprising Fisheries Complex, Integrated Fish Unit, Fish Seed Rearing and Fish Processing Unit for production healthy Seed and Quality value added Fish and Fish Products. The BS degree program addresses the needs for sustainable development of the country's fisheries resources and responds to the call for production of highly trained manpower in the field. Its curricula offerings aim to impart to students both, theoretical knowledge and practical skills as well as develop analytical capabilities as a tool toward innovative solutions to fisheries and related programs. The BS in Fisheries and Aquaculture offers extensive coursework in the major areas of Fisheries science and Aquaculture. The Fisheries and Aquaculture program offers hands-on experience raising local fish and shrimp species, and enriches them with diverse fisheries management field experiences. The faculty's natural setting at Ravi Campus, Pattoki will provide students with an "outdoor aquaculture laboratory". Different lakes, ponds, streams, and rivers in the vicinity will be regularly visited for field work. In addition, students will also have opportunities to conduct independent research on addressing new available technologies in fisheries and aquaculture.

SCHEME OF STUDIES FOR BS FISHERIES AND AQUACULTURE

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
AQFS -12101	Animal Diversity-I: Invertebrates	4(3-1)
AQFS-12102	Ichthyology	4(3-1)
AQFS-12103	Soil and Water Chemistry	3(2-1)
SOSC-12104	Functional English	3(3-0)
SOSC-12105	Ideology and Constitution of Pakistan	2(2-0)
CHEM-12106	Physical Chemistry	3(2-1)
SOSC-12107/	Holy Quran Translation-I/	
SOSC-12108	Ethics-I	1(1-0)
	Sub Total	20(16-4)
	SEMESTER TWO	
AQFS-12201	Animal Diversity-II: Vertebrates	4(3-1)
AQFS-12202	Freshwater Aquaculture	4(3-1)
AQFS-12203	Pond Construction and Designing	3(1-2)
SOSC-12204	Expository Writing	3(3-0)
STCS-12205	Biomathematics	3(3-0)
SOSC-12206/	Islamic studies/	
SOSC-12207	Ethics	2(2-0)
	O 1. T. (.)	40/45 4
	Sub Total	19(15-4)
	SEMESTER THREE	19(15-4)
AQFS-12301		4(3-1)
AQFS-12302	SEMESTER THREE Animal Form & Function-I Aquatic Ecology	4(3-1) 3(2-1)
AQFS-12302 AQFS-12303	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology	4(3-1) 3(2-1) 3(2-1)
AQFS-12302 AQFS-12303 WECO-12304	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management	4(3-1) 3(2-1) 3(2-1) 3(2-1)
AQFS-12302 AQFS-12303	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship	4(3-1) 3(2-1) 3(2-1) 3(2-1)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0) 1(1-0)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II Sub Total	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/ SOSC-12308	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II Sub Total SEMESTER FOUR	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0) 1(1-0) 19(15-4)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/ SOSC-12308	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II Sub Total SEMESTER FOUR Animal Form & Function-II	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0) 1(1-0) 19(15-4)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/ SOSC-12308 AQFS-12401 AQFS-12402	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II Sub Total SEMESTER FOUR Animal Form & Function-II Aquatic Toxicology	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0) 1(1-0) 19(15-4) 4(3-1) 3(2-1)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/ SOSC-12308 AQFS-12401 AQFS-12402 BTNY-12403	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II Sub Total SEMESTER FOUR Animal Form & Function-II Aquatic Toxicology Biodiversity and Conservation	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0) 1(1-0) 19(15-4) 4(3-1) 3(2-1) 3(2-1)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/ SOSC-12308 AQFS-12401 AQFS-12402 BTNY-12403 SOSC-12404	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II Sub Total SEMESTER FOUR Animal Form & Function-II Aquatic Toxicology Biodiversity and Conservation Sociology	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0) 1(1-0) 19(15-4) 4(3-1) 3(2-1) 3(2-1) 2(2-0)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/ SOSC-12308 AQFS-12401 AQFS-12402 BTNY-12403 SOSC-12404 STCS-12405	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II Sub Total SEMESTER FOUR Animal Form & Function-II Aquatic Toxicology Biodiversity and Conservation Sociology Applications of Information and Communication Technologies (ICT)	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0) 1(1-0) 19(15-4) 4(3-1) 3(2-1) 3(2-1) 2(2-0) 3(2-1)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/ SOSC-12308 AQFS-12401 AQFS-12402 BTNY-12403 SOSC-12404 STCS-12405 SOSC-12406	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II Sub Total SEMESTER FOUR Animal Form & Function-II Aquatic Toxicology Biodiversity and Conservation Sociology Applications of Information and Communication Technologies (ICT) Arts and Humanities	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0) 1(1-0) 19(15-4) 4(3-1) 3(2-1) 3(2-1) 2(2-0) 3(2-1) 2(2-0)
AQFS-12302 AQFS-12303 WECO-12304 SOSC-12305 DEBM-12306 SOSC-12307/ SOSC-12308 AQFS-12401 AQFS-12402 BTNY-12403 SOSC-12404 STCS-12405	SEMESTER THREE Animal Form & Function-I Aquatic Ecology Economic Zoology Natural Resource Management Civics and Community Engagement Entrepreneurship Holy Quran Translation-II/ Ethics-II Sub Total SEMESTER FOUR Animal Form & Function-II Aquatic Toxicology Biodiversity and Conservation Sociology Applications of Information and Communication Technologies (ICT)	4(3-1) 3(2-1) 3(2-1) 3(2-1) 2(2-0) 3(3-0) 1(1-0) 19(15-4) 4(3-1) 3(2-1) 3(2-1) 2(2-0) 3(2-1)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	
AQFS-12501	Fish Microbiology & Immunology	3(2-1)
AQFS-12502	Fish Genetics & Biotechnology	3(2-1)
AQFS-12503	Ornamental Fishes and Aquaria Management	3(2-1)
AQFS-12504	Fish Hygiene and Health Management	3(2-1)
BTNY-12505	Aquatic Vegetation	3(2-1)
SOSC-12506	Holy Quran Translation-III/	
SOSC-12507	Ethics-III	1(1-0)
	Sub Total	16(11-5)
	SEMESTER SIX	
AQFS-12601	Fish Breeding	3(1-2)
AQFS-12602	Fish Farm & Hatchery Management	4(3-1)
AQFS-12603	Fish Nutrition	4(3-1)
AQFS-12604	Fish Physiology	3(2-1)
ENSC-12605	Environmental Biology	3(2-1)
	Sub Total	17(11-6)
	SEMESTER SEVEN	
AQFS-12701	Mariculture Technology	4(3-1)
AQFS-12702	Fishing Gear and Technology	3(2-1)
AQFS-12703	Fish Processing and Quality Assurance	3(2-1)
AQFS-12704	Fisheries Regulation and Administration	3(3-0)
AQFS-12705	Fisheries Extension and Feasibility	3(3-0)
SOSC-12706/	Holy Quran Translation-IV/	
SOSC-12707	Ethics-IV	1(1-0)
	Sub Total	17(14-3)
	SEMESTER EIGHT	
AQFS-12801	Internship	3(0-3)
AQFS-12802	Capstone Project	3(0-3)
	Sub Total	6(0-6)
	Grand Total	134(98-36)

The program is offered as Single Major.

*This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.





DEPARTMENT OF BIOLOGICAL SCIENCES

BS Biological Sciences

The scope of biological sciences deals with the utility of plants and animals in relation to mankind. The course contents of biological sciences are so vast that the number of branches covering it is on the increase. The scope of biological sciences also includes the benefits derived from the plants and animals. Botany, along with its allied branches, provides employment opportunities. There is also enormous employment scope in academics, agriculture, horticulture, forestry, etc. Biological sciences is a key discipline in the universities to achieve sustainable development. The graduates will have different options for going into M. Phil and Ph. D. studies, be employed in different schools, colleges, various public and private departments/organizations like, Wildlife, Forestry adopting their own entrepreneurship and create further employment opportunities.

SCHEME OF STUDIES FOR BS BIOLOGICAL SCIENCES

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
BIOS-17101	Diversity of Plants	3(2-1)
BIOS-17102	Animal Diversity-I (Invertebrate)	4(3-1)
BIOS-17103	Cell Biology	3(2-1)
SOSC-17104	Functional English	3(3-0)
SOSC-17105	Ideology and Constitution of Pakistan	2(2-0)
CHEM-17106	Physical Chemistry	3(2-1)
SOSC-17107/	Holy Quran Translation-I/	
SOSC 17108	Ethics- I	1(1-0)
	Sub Total	19(15-4)

Course No.	Course Title	Credit Hours
	SEMESTER TWO	
BIOS-17201	Animal Diversity-II (Chordates)	4(3-1)
BIOS-17202	Plant Systematics, Anatomy and Development	3(2-1)
CHEM-17203	Inorganic and Organic Chemistry	3(2-1)
STCS-17204	Biomathematics	3(3-0)
SOSC-17205	Expository Writing	3(3-0)
SOSC-17206/	Islamic Studies/	
SOSC17207	Ethics	2(2-0)
	Sub Total	18(15-3)

SEMESTER THREE		
BIOS-17301	Biological Physics	2(2-0)
BIOS-17302	Animal Form and Function-I	4(3-1)
BIOS-17303	Plant Physiology and Ecology	3(2-1)
MICR-17304	General Microbiology and Mycology	3(2-1)
SOSC-17305	Civics and Community Engagement	2(2-0)
DEBM-17406	Entrepreneurship	2(2-0)
SOSC-17307/	Holy Quran Translation- II/	
SOSC17308	Ethics-II	1(1-0)
	Sub Total	17(14-3)
	SEMESTER FOUR	
BIOS-17401	Animal Form and Function-II	4(3-1)
BIOS -17402	Phycology and Bryology	3(2-1)
MICR-17403	Bacteriology and Virology	3(2-1)
SOSC-17404	Sociology	2(2-0)
STCS-17405	Applications of Information and Communication Technologies (ICT)	3(2-1)
SOSC-17406	Arts and Humanities	2(2-0)
STCS-17407	*Biostatistics	3(3-0)
	Sub Total	20(16-4)
	SEMESTER FIVE	
BIOS-17501	Economic Biology	3(2-1)
BIOS-17502	General Ecology	3(2-1)
BIOS -17503	Environmental Pollution	3(2-1)
BIOS-17504	Biological Techniques	3(1-2)
BIOC-17505	General Biochemistry	3(2-1)
SOSC-17506/	Holy Quran Translation-III/	. ,
SOSC17507	Ethics-III	1(1-0)
	Sub Total	16(10-6)

LIST OF ELECTIVE COURSES

Course No.	Course Title	Credit Hours
	SEMESTER SIX (Elective-I)	
BIOS - 17605	Plant Anatomy	3(2-1)
BIOS - 17607	Global Environmental Processes	3(2-1)
BIOS - 17608	Bioenergetics	3(2-1)
BIOS - 17609	Brain and Behavior	3(2-1)
BIOS - 17610	Medical Microbiology	3(2-1)
BIOS - 17611	Parasite Biology	3(2-1)
BIOS - 17612	Biological Sciences with Management	3(2-1)
BIOS – 17713	Medicinal and Aromatic Plants	3(2-1)

	SEMESTER SIX	
BIOS-17601	Research Methodology	2(2-0)
BIOS-17602	Genetics	3(2-1)
BIOS -17603	Biosecurity and Biosafety	2(1-1)
BIOS-17604	Wildlife	3(2-1)
BIOS-17605	Elective-I	3(2-1)
BIOC-17606	Enzymology	3(2-1)
	Sub Total	16(11-5)
	SEMESTER SEVEN	
BIOS -17701	Fish Culture	3(2-1)
BIOS -17702	Bioinformatics	3(2-1)
BIOS-17703	Animal Behavior	3(3-0)
BIOS-17704	Molecular Biology	3(2-1)
PHRM -17505		3(2-1)
SOSC-17706/	Holy Quran Translation-IV/	
SOSC17707	Ethics-IV	1(1-0)
	Sub Total	16(12-4)
	SEMESTER EIGHT	
BIOS -17801	Genomics and Proteomics	3(3-0)
BIOS -17802	Natural Resource Management	3(3-0)
BIOS 17803	Elective-I	3(2-1)
BIOS -17804	linternship	3(0-3)
BIOS -17805	Capstone Project	3(0-3)
	Sub Total	15(8-7)
	Grand Total	137(101-3

The program is offered as Single Major.

*This is a broader category within General Education Courses.

Course No.	Course Title	Credit Hours
	SEMESTER EIGHT (Elective-II)	
BIOS - 17803	Entomology and Integrated Pest Management	3(2-1)
BIOS - 17806		3(2-1)
BIOS - 17807	Structure and Function of Protein	3(2-1)
BIOS - 17808		3(2-1)
BIOS – 17809	Plant Tissue Culture	3(2-1)

SCHEME OF STUDIES FOR BS BOTANY

Course No.	Course Title	Hours
	SEMESTER ONE	
BTNY- 29101	Diversity of Plants	4(3-1)
BTNY-29102	Mycology and Plant Pathology	3(2-1)
WECO- 29103	Animal Diversity-I (Invertebrate)	3(3-0)
SOSC-29104	Functional English	3(3-0)
SOSC-29105	Ideology and Constitution of Pakistan	2(2-0)
CHEM-29106	Physical Chemistry	3(2-1)
SOSC- 29107/	Holy Quran Translation-I/	
SOSC- 29108	Ethics-I	1(1-0)
	Sub Total	20(16-4)
	SEMESTER TWO	
BTNY-29201	Plant Systematics, Anatomy and Development/ Embryology	4(3-1)
WECO-29202	Animal Diversity-II (Chordates)	3(3-0)
SOSC-29203	Expository Writing	3(3-0)
STCS-29204	Biomathematics	3(3-0)
SOSC-29205/	Islamic Studies/	
SOSC-29206	Ethics	2(2-0)
	Sub Total	15(14-1)
	SEMESTER THREE	
BTNY-29301	Plant Physiology and Ecology	4(3-1)
BTNY-29302	Cell Biology, Genetics and Evolution	4(3-1)
CHEM-29303	Inorganic and Organic Chemistry	3(2-1)
DEBM-29304	Entrepreneurship	2(2-0)
SOSC-29305	Civics and Community Engagement	2(2-0)
SOSC-29306/	Holy Quran Translation-II/	
SOSC-29307	Ethics-II	1(1-0)
	Sub Total	16(13-3)
	SEMESTER FOUR	
BTNY-29401	Biodiversity and Conservation	4(3-1)
BTNY-29402	Phycology and Bryology	3(2-1)
BTNY-29403	Bacteriology and Virology	3(2-1)
SOSC-29404	Sociology	2(2-0)
STCS-29405	Applications of Information and Communication Technologies (ICT)	3(2-1)
SOSC-29406	Arts and Humanities	2(2-0)
STCS-29407	*Biostatistics	3(3-0)
	Sub Total	20(16-4)

Course No.	Course Title	Credit Hours
	SEMESTER FIVE	
BTNY-29501	Diversity of Vascular Plants	3(2-1)
BTNY-29502	Environmental Biology	3(2-1)
BTNY-29503	Genetics-IPlant Systematics	3(2-1)
BTNY-29504	Ornamental Fishes and Aquaria	3(2-1)
AQFS-29505	Management	3(2-1)
SOSC-29506/	Holy Quran Translation-III/	
SOSC-29507	Ethnic-III	1(1-0)
	Sub Total	16(11-5)
	SEMESTER SIX	
BTNY-29601	Plant Anatomy	3(2-1)
BTNY-29602	Plant Biochemistry-I	3(2-1)
BTNY-29603	Plant Ecology-I	3(2-1)
BTNY-29604	Plant Physiology-I	3(2-1)
BTNY-29605	Medicinal and Aromatic Plants	3(2-1)
	Sub Total	15(10-5)
	SEMESTER SEVEN	
BTNY-29701	Molecular Biology	3(2-1)
BTNY-29702	Plant Biochemistry-II	3(2-1)
BTNY-29703	Plant Ecology-II	3(2-1)
WECO-29704	Animal Behaviour	3(3-0)
PHAR-29705	Pharmacology	3(2-1)
SOSC-29706/	Holy Quran Translation-IV/	
SOSC 29707	Ethics-IV	1(1-0)
	Sub Total	16(12-4)
	SEMESTER EIGHT	
BTNY-29801	Plant Physiology-II	3(2-1)
BTNY-29802	Genetics-II	3(2-1)
BTNY-29803	Plant Tissue Culture	3(2-1)
BTNY-29804	Internship	3(0-3)
BTNY-29805	Capstone Project	3(0-3)
	Sub Total	15(6-9)
	Grand Total	132(98-34)

The program is offered as Single Major.

^{*}This is a broader category within General Education Courses. The definitive course title will be available at the time of enrollment.

FACULTY OF LIFE SCIENCES BUSINESS MANAGEMENT (FLSBM)

UVAS Business School

Dean's Message

The Faculty of Life Sciences Business Management (FLSBM) has a vision to educate life sciences professionals in the domain of business management. Thus, it is my pleasure to offer a variety of undergraduate and postgraduate degree Programs at FLSBM. These Programs have been carefully designed keeping in mind the needs of relevant industries and emerging trends in the domain of business management. Recently, this faculty has been repositioned as UVAS Business School and the quality of its management degree Programs can be judged from the fact that this Business School is in the process of obtaining accreditation from National Business Education Accreditation Council (NBEAC) of the Higher Education Commission (HEC) of Pakistan. Degree Programs include BBA Morning and Evening. The post-graduate

Degree Programs include M. Phil (Business Management). In addition to academic Programs, UVAS Business School has been actively

involved in solving industry and stakeholders through research projects under the Center for Applied Policy Research in Livestock (CAPRIL), which was established with the collaboration of USAID. Recently, this business school has completed a development project from the Government of Pakistan to establish an 'Export Facilitation Center for Livestock and Poultry (EFCLP)' and submitted many research projects to various funding agencies, which is a clear indicator of research orientation. This faculty also has state-of-the-art IT center which provides networking and other related services to its all six campuses.

To give real-world practical experience to our graduates, regular guest speaker lectures of successful business entrepreneurs and industrialists are arranged which help our students to blend their theoretical knowledge with practical scenarios. Moreover, arranging study tour to business organizations is a regular feature of this business school, which adds value to our graduates. We actively encourage and facilitate our students to pursue industry internships, providing them with invaluable opportunities to gain real-world experience and maximize their exposure to the business world.

The Business School has highly qualified faculty comprising of 15 PhD faculty members out of which 10 are foreign qualified. The rest of all faculty members are PhD scholars as they are pursuing their studies in well-reputed universities of Pakistan and abroad. We are committed to uplift quality of education through classroom learning, field experiences, internship, case studies approach and research projects. I welcome you all to this alma mater and wish best of luck in your studies.

Prof. Dr. Muhammad Azam, Ph.D.Dean, FLSBM/ UVAS Business School



FACULTY OF LIFE SCIENCES BUSINESS MANAGEMENT (FLSBM)

DEPARTMENT OF ECONOMICS AND BUSINESS

MANAGEMENT

Chariman / Professor

Prof. Dr. Tahir Mahmood, Ph.D.

Professor

Prof. Dr. Rana Muhammad Ayyub, Ph.D. (on leave for Postdoc.)

Assistant Professors

Dr. Muhammad Ali Hamza, Ph.D.

Dr. Muhammad Asif, Ph.D.

Dr. Adnan Sarwar. Ph.D.

Dr. Muhammad Imran, Ph.D.

Dr. Raheel Safdar, Ph.D.

Lecturers

Ms. Samia Ayyub, Ph.D. Scholar

Mr. Muhammad Zahid Iqbal, Ph.D. Scholar

Mr. Abaidullah, Ph.D. Scholar

DEPARTMENT OF STATISTICS AND COMPUTER SCIENCE

Chairman/Associate Professor

Dr. Liaquat Ahmed, Ph.D.

Professor

Prof. Dr. Muhammad Azam, Ph.D.

Assistant Professors

Dr. Farhan Masud, Ph.D.

Dr. Muhammad Bilal, Ph.D.

Dr. Muhammad Khawar Bashir, Ph.D.

Dr. Azeem Ali, Ph.D.

Lecturers

Dr. Muhammad Hamid, Ph.D.

Dr. Amir Ali, Ph.D.

Mr. Talha Omer, Ph.D. Scholar (On study leave)

BBA 4 Years Program: Morning & Evening

The Bachelor of Business Administration (BBA) program provides a comprehensive understanding of business and management principles, equipping students with entrepreneurial skills and the 21st-century competencies needed to succeed in today's dynamic business landscape. In addition to traditional tracks, specialized courses in niche areas such as livestock management, agricultural management and health management provide unique expertise in high-growth sectors. Graduates emerge as well-rounded professionals with a strong foundation in business, innovation, and adaptability.

SCHEME OF STUDIES FOR BACHELOR OF BUSINESS ADMINISTRATION

Course No.	Course Title	Credit Hours
	SEMESTER ONE	
MNGT-11101	Introduction to Business	3(3-0)
SOSC-11101	Functional English	3(3-0)
SOSC-11102/	Islamic Studies/	
SOSC-11103	Ethics	2(2-0)
STCS-11101	Applications of Information and Communication Technologies (ICT)	3(2-1)
QUNT-11101	Business Mathematics	3(3-0)
NTSC-11101	Everyday Science	3(2-1)
	Sub Total	20(16-4)
	SEMESTER TWO	
ACCT-11201	Fundamentals of Accounting	3(3-0)
MNGT-11202	Principles of Management	3(3-0)
ECON-11201	Micro Economics	3(3-0)
STCS-11202	Business Statistics	3(3-0)
SOSC-11204	Ideology and Constitution of Pakistan	2(2-0)
SOSC-11205	Expository Writing	3(3-0)
SOSC-11206/	Holy Quran Translation-I/	
SOSC-11207	Ethics-I	1(1-0)
	Sub Total	18(18-0)
	SEMESTER THREE	
ACCT-11302	Financial Accounting	3(3-0)
MRKT-11301	Principles of Marketing	3(3-0)
ENGL-11303	Business Communication Skills	3(3-0)
MNGT-11303	Organizational Behavior	3(3-0)
ECON-11302	Macro Economics	3(3-0)
SOSC-11308	Sociology	2(2-0)
	Sub Total	17(17-0)
	SEMESTER FOUR	
FINC-11401	Business Finance	3(3-0)
ACCT-11403	Managerial Accounting	3(3-0)
MRKT-11402	Consumer Behavior	3(3-0)
SOSC-11409	Psychology	2(2-0)
ESGM-11401	Civics and Community Engagements	2(2-0)
MNGT-11404	Entrepreneurship	3(3-0)
SOSC-11410 /	Holy Quran Translation-II /	
SOSC-11411	Ethics-II	1(1-0)
	Sub Total	17(17-0)

Course No.	Course Title	Hours			
	SEMESTER FIVE				
FINC-11502	Corporate Finance	3(3-0)			
MRKT-11503	Supply Chain Management	3(3-0)			
STCS-11503	E-commerce & AI	3(3-0)			
MNGT-11505	Human Resource Management	3(3-0)			
LWTX-11501	Business Law and taxation	3(3-0)			
	Sub Total	15(15-0)			
	SEMESTER SIX				
FINC-11603	Financial Markets	3(3-0)			
QUNT-11602	Data Analysis and Forecasting	3(3-0)			
ESGM-11602	Corporate Governance	3(3-0)			
	Elective I	3(3-0)			
MNGT-11606	Business Research Methods	3(3-0)			
SOSC-11612/	Holy Quran Translation-III /				
SOSC-11613	Ethics-III	1(1-0)			
	Sub Total	16(16-0)			
	SEMESTER SEVEN				
MNGT-11707	Production Operations Management	3(3-0)			
MNGT-11708	International Business	3(3-0)			
MNGT-11709	Strategic Management	3(3-0)			
	Elective II	3(3-0)			
INTR-11701	Internship	3(0-3)			
	Sub Total	15(12-3)			
	SEMESTER EIGHT				
MNGT-11810	Total Quality Management	3(3-0)			
	Elective III	3(3-0)			
	Elective IV	3(3-0)			
SOSC-11814/	Holy Quran Translation-IV /				
SOSC-11815	Ethics-IV	1(1-0)			
PROJ-11801	Capstone Project	3(0-3)			
	Sub Total	13(10-3)			
	Grand Total	128(120-8)			

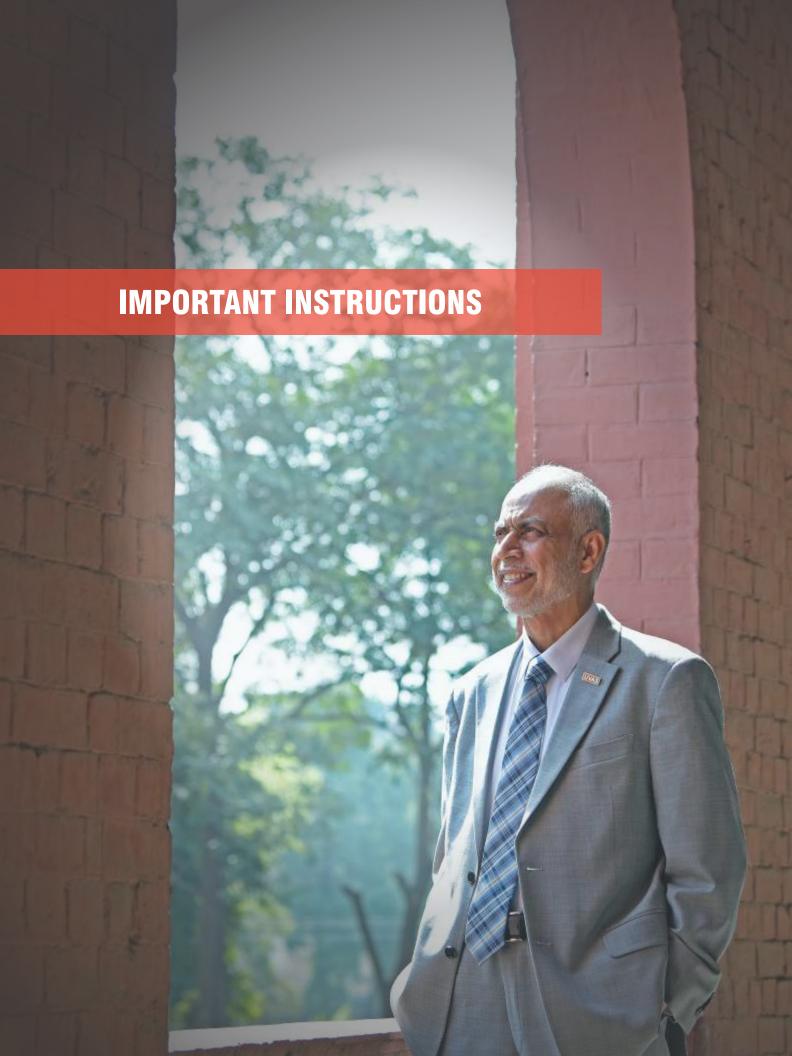
BBA SPECIALIZATION TRACKS

No.	Course No.	Course Title	Credit Hours
		MARKETING	
Elective I	MRKT-11604	Sales and Advertising Management	3(3-0)
Elective II	MRKT-11705	Brand Management	3(3-0)
Elective III	MRKT-11806	Retail Marketing	3(3-0)
Elective IV	MRKT-11807	Services Marketing	3(3-0)
No.	Course No.	Course Title	Credit Hours
		FINANCE	
Elective I	FINC-11604	Investment and Portfolio Management	3(3-0)
Elective II	FINC-11705	Islamic Banking & Finance	3(3-0)
Elective III	FINC-11806	Financial Reporting & Analysis	3(3-0)
Elective IV	FINC-11807	International Financial Management	3(3-0)
No.	Course No.	Course Title	Credit Hours
		HUMAN RESOURCE MANAGEMENT	
Elective I	MNGT-11607	Recruitment & Selection	3(3-0)
Elective II	MNGT-11710	Training and Development	3(3-0)
Elective III	MNGT-11811	Performance Management	3(3-0)
Elective IV	MNGT-11812	Reward Management	3(3-0)

No.	Course No.	Course Title	Credit Hours
		HEALTH ADMINISTRATION	
Elective I	HCAD-11601	Introduction to Health Services Administration	3(3-0)
Elective II	HCAD-11702	Health Care Economics	3(3-0)
Elective III	HCAD-11803	Healthcare Planning and Evaluation	3(3-0)
Elective IV	HCAD-11804	Hospital Management	3(3-0)
No.	Course No.	Course Title	Credit Hours
		LIVESTOCK BUSINESS MANAGEMEN	
Elective I	LSBM-11601	Introduction to Livestock Production	3(3-0)
Elective II	LSBM-11702	Dairy Economics and Farm Management	3(3-0)
Elective III	LSBM-11803	Livestock Supply Chain and Procurement	3(3-0)
Elective IV	LSBM-11804	Agricultural Marketing	3(3-0)
No.	Course No.	Course Title	Credit Hours
		AGRIBUSINESS MANAGEMENT	
Elective I	AGBM-11601	Farm Planning and Management	3(3-0)
Elective II	AGBM-11702	Agri Production Economics	3(3-0)
Elective III	AGBM-11803	Agri Value Chain and Technology	3(3-0)
Elective IV	AGBM-11804	Agricultural Marketing	3(3-0)







ALLOCATION OF SEATS

		Op Me	en									AII		Or			113											
Degre	ees	Male	Female	AJK	N. Areas	Bal.	FATA	NWFP /KPK	CDFP	CAS	OP	SQ	C0P	CV/PI	AHG/AR PVMC	U/AHG R PVMC	CPVS	CUFM	CUE	CPG	Ö	CPI	DAE	*CFI	CM	PMSS	PTAP	Total
DVM	(M)	100	10	3	3	8	10	2	3	1	1	2	5	2	1	1	1	2	2	-	-	-	-	-	2	3	1	163
(CC)	(E)	11	10	-	ı	-	-	-	ı	1	•	1	ı	1	-	-	1	1	-	ı			ı	-	1	-	1	110
₽VM	(M)	79	8	-	-	-	-	-	-	-	1	1	3	2	1	1	-	2	2	-		-	-	-	1	-	1	99
Jhang	(E)	11	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	110
DVM Narowa I	(M)	56	10	-	-	-	-	-	-	-	1	1	3	-	-	-	-	2	2	-		-	-	-	1	-	1	74
	(E)	7	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-		-	70
BS Applied Micro. (CC)	(M)	6		-	-	-	1	-	-	-	1	1	3	-	-	-	-	2	2	-	-	-	-	-	1	-	1	72
	(E)	7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	70
BS Applied Micro. (J C)	(M)	5		-	-	-	-	-	-	-	1	1	2	-	-	-	-	2	2	-	-	-	-	-	1	-	1	58
BS	(E)	5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
Applied Micro. (N C)	(M)	5	О	-	-	-	-	-	-	-	1	1	2	-	-	-	-	2	2	-		-	-	-	1	-	-	57
BS Medical Lab.	(M)	5	О	-	1	-	1	-	1	1	1	1	2	-	-	-		2	2	-	-	1	1	-	1	-	1	60
Tech. (CC)	(E)	7	О	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	70
Medical Lab. Tech. (R C)	(M)	4	О	-	-	-	1	-	-	-	1	1	2	-	-	-	-	2	2	1	-	ı	-	-	-	-	1	50
BS Medical Lab. Tech. Narowal	(M)	5	О	-	-	-	-	-	-	-	1	1	2	-	-	-	-	2	2	-		-	-	_	1	_	-	57
BS Zoolog y (RC)	(M)	6	0	-	-	-	-	-	-	-	1	1	3	-	-	-	-	2	2		-	-	-	_	1	-	1	70
BS Zoolog y (J.C)	(M)	3	6	-	-	-	-	-	-	-	1	1	2	-	-	-		2	2	-		-	-	-	-	-	-	42
BS F&AQ (RC)	(M)	3	0	-	-	-	-	-	-	-	1	1	2	-	-	-	-	2	2		-	-	-	-	-	-	1	39
BS D. Tech (RC)	(M)	2	7	-	ı	-	1	-	ı	ı	1	1	1	-	-	-	ı	2	2			-	10	_	-	-	1	47
BS Poultry Scienc e (RC)	(M)	4	2	-	-	-	-	-	-	-	1	1	2	-	-		1	2	2		-	-	-	_	-	_	1	51
BS Bio-	(M)	5	О	-	-	-	1	-	-	1	1	1	2	-	-	-		2	2			-	-	-	1	-	1	61
tech (CC)	(E)	5	0	-	ı	-	-	-	ı	1	ı	•	ı	-	-	-	•	-	-	-	-	-	ı	-	-	-	-	50
BS Bio- Chem	(M)	5	О	-	-	-	1	-	-	-	1	1	2	-	-	-	-	2	2	-	2	-	-	-	1	-	1	64
(CC)	(E)	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
Biologica I Sci. (CC)	(M) (E)	3		-	-	-	1 -	-	-	-	1 -	1 -	1 -	-	-	-	-	2	2	-	2	-	-	-	-	-	1 -	43
BS Biologica I Sci. (J.C)	(M)	4		-	-	-	-	-	-	-	1	1	1	-	-		-	2	2	-	-	-	-	-	-	-	-	52
BS Biologica I Sci. (R C)	(M)	4	0	-	-	-	-	-	-	-	1	1	2	-	-	-	1	2	2	ı	-	-	ı	-	-	-	1	47
BS ES (CC)	(M)	5	0	-	•	-	1	-	•	-	1	1	2	-	-	-	-	2	2	-	-	-	-	-	1	-	1	61
(CC)	(E)	3	0	-	ı	-	-	-	ı	ı	-	1	ı	-	-	-	1	1	-	1	-	1	1	-	1	-	-	30
BS N & D (CC)	(M)	6		-	-	-	-	-	-	-	1	1	3	-	-	-	-	2	2	-	-	-	-	-	1	-	1	77
Bs.	(E)	7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75
Food Science & Tech	(M)	6		-	-	-	-	-	-	-	1	1	3	_	-	-	-	2	2	-	-	-	-	2	1	-	1	72
(CC) Bs. Botany	(E)	7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70
Botany (RC)	(M)	4		-	-	-	-	-	-	-	1	1	2	_	-	-	-	2	2	•	-	-	-	-	-	-	-	48
BBA (CC)	(M)	5			-	-	1	-	-	-	1	1	2	-	-	-	-	2	2	-	-	-	-	-	1	-	1	66
	(E) (M)	2		-	-	-	1	-	A = 1 N =	1	1	1	3	_	-	-	1	2	2	2	_	2	1	-	-	-	1	55 50
Pharm – D (CC)	(E)	5		_	-	_	_	-	1 AF= 1					_	_	_	-	-	-	-	_	-	-	_	_		-	50
	(-)	3	-									_					_		_	_		_	_	l -		<u> </u>		30

Legends: AJK = Azad Jammu& Kashmir, N. Areas = Northern Area, Bal = Baluchistan, FATA = Federally Administered Tribal Areas, N.W.F.P/KPK, CDFP = Children of Defense Forces Personnel, CAS = Children of Army Shuhdas, DP = Disable Person, SQ = Sports Quota, COP = Children of Overseas Pakistani, CV/PI = Children of Veterinary / Poultry Industrialists, AHG/AR PVMC = Veterinary / Animal Husbandry Graduates / Alumni and Registered with PVMC, U/AHGR PVMC = Veterinary / Animal Husbandry Graduates Registered with PVMC, EVS = Children of PVMC, CUFM = Children of University faculty members, CUE = Children of University Employees (Other than faculty member), CPG = Children of Pharmacy Graduates, CI = Children of Industrialist, CPI = Children of Pharmaceutical Industrialist, DAE = Diploma Associate of Engineering, CFI = *Children of Food Industrialists, CM = Children of inorities, PMSS = Prime Minister Scholarship Scheme, PTAP = Pakistan Technical Assistance Program (Foreign Students).

If the reserved seats mentioned in all degree programs cannot fill during the Academic Session 2023-24, then said seats will be converted into open merit seats.

Regulations/Policies for various quotas regarding admission in undergraduate programs

CATEGORY	RULES / POLICIES
Disable Person	 Attested Copies of the disability Certificate issued for persons with disabilities from the National / Provincial Council for the Rehabilitation of Disabled Persons or a CNIC with disability logo. Recommendation of the Medical Board of UVAS (Approved by the Vice Chancellor / Pro Vice-Chancellor). Preference of degree for admission given by the candidate. Selection of candidate will be purely on MERIT as indicated in eligibility criteria.
Sports Quota	 Certificate in the relevant game from sports board of school / college / district / provincial / national level. Recommendation of the Sports Committee / Board of UVAS, Lahore (Approved by Vice Chancellor / Pro Vice-Chancellor). Preference of degree for admission given by the candidate. Selection of candidate will be purely on MERIT as indicated in eligibility criteria.
Children of Overseas Pakistanis	 Valid NICOP / Foreign Employment Letter certified by Concerned Pakistan Embassy or Consulate / Membership with Overseas Pakistanis Foundation of the candidate's Parents. CNIC copies of Parents. Candidates have to pay Rs:1200,000/- (Refundable, if not admitted) through online generated Bank challan at the time of submission of application. Preference of degree for admission given by the candidate. Selection of candidate will be purely on merit as indicated in eligibility criteria.
Foreign Students	As per HEC / UVAS Approved Policy
Children of UVAS Employees.	 Only the children of Regular / Temporary (Likely to become permanent) / TTS / Retired / Deceased employees are eligible to apply for admission. Employee should have minimum of 5 years of regular services in the University as certified by the Registrar Office. CNIC copies of Parents. Preference of degree for admission given by the candidate. Selection of candidate will be purely on MERIT as indicated in eligibility criteria.
Children of those Veterinary / Animal Husbandry Graduates from UVAS who are registered Alumni	 Attested copy of the degree and transcripts of Veterinary Graduate / Animal Husbandry Graduates of the parents. Valid Registration Certificate of Pakistan Veterinary Medical Council. Valid Certificate of UVAS Alumni. CNIC copies of Parents. Preference of degree for admission given by the candidate. Selection of candidate will be purely on merit as indicated in eligibility criteria.
Children of those Veterinary / Animal Husbandry Graduates who are registered with PVMC	 Attested copy of the degree and transcripts of Veterinary Graduate/Animal Husbandry Graduates of the parents. Valid Registration Certificate of Pakistan Veterinary Medical Council. CNIC copies of Parents. Preference of degree for admission given by the candidate. Selection of candidate will be purely on merit as indicated in eligibility criteria.
Children of Para Veterinary Staff	 Attested copy of the diploma in Veterinary Assistant/ Livestock Assistant from HEC recognized University / Institute / PVMC of the parents. CNIC copies of Parents. Preference of degree for admission given by the candidate. Selection of candidate will be purely on merit as indicated in eligibility criteria.
Children of Armed Forces Personnel (Army, Navy, Air-force)	Nomination will be accepted ONLY from the relevant head office (Army, Navy, Air-force) after fulfilling the eligibility criteria.
Children of Pharmaceutical Industries	 Evidence of ownership of the Pharmaceutical Industry. Registration with Chamber of Commerce. Must have Valid NTN Number.

	 Must be Active Taxpayer. Dry manufacturing License of the pharmaceutical industry approved regulatory authority. CNIC copies of Parents. Candidates have to pay Rs:1200,000/- (Refundable, if not admitted) through online generated Bank challan at the time of SUBMISSION of application. Preference of degree for admission given by the candidate. Selection of candidate will be purely on MERIT as indicated in eligibility criteria.
Children of Pharmaceutical Graduates	 Attested copy of the degree and transcripts of Pharmacy of the parents. Valid Registration Certificate of the parents issued by the Provincial Pharmacy Council. CNIC copies of Parents. Preference of degree for admission given by the candidate. Selection of candidate will be purely on MERIT as indicated in eligibility criteria.
Children of Veterinary / Poultry Industrialist	 Evidence of ownership of the Veterinary / Poultry Industry (Farms / Pharmaceutical Unit / Hatchery / Feed Mill etc.). Registration with Chamber of Commerce. Must have Valid NTN Number. Must be Active Taxpayer. CNIC copies of Parents Candidates have to pay Rs:1200,000/- (Refundable, if not admitted) through online generated Bank challan at the time of SUBMISSION of application. Preference of degree for admission given by the candidate. Selection of candidate will be purely on merit as indicated in eligibility criteria.
Children of Industrialist	 Evidence of ownership of the Industry. Registration with Chamber of Commerce. Must have Valid NTN Number. Must be Active Taxpayer. CNIC copies of Parents Candidates have to pay Rs:1200,000/- (Refundable, if not admitted) through online generated Bank challan at the time of SUBMISSION of application. Preference of degree for admission given by the candidate. Selection of candidate will be purely on MERIT as indicated in eligibility criteria.
Hafiz-e-Quran (for 20 marks to be added in FSc. Marks)	



Fee Schedule Of Undergraduate And Postgraduate Level Degree Programs Admitted in **Academic Session 2023-24** Fee 2nd Semester Sr. Fee Fee Head (1st Semester) & onward * No. Fee Schedule for Under Graduate Level Degree Programs To be Charged at the time of Admission in the University 0 Admission Fee (one time) 18,820 1 0 2 University Registration Fee (one time) 18,820 0 3 University Security (one time) Refundable 3,070 0 4 Library Security (one time) Refundable 5,640 0 University I.D Card (one time) 520 **Total of One time Charges** 46,870 0 **Regular Charges** Tuition Fee (per semester) 32,440 25,610 Examination Fee (per semester) 11.820 11.820 **Total of Regular Charges** 44,260 37,430 Total (Rs.) 91,130 37,430 **Residential Charges** To be Charged at the time of Admission in the University Hostel Admission Fee (one time) 1,070 0 1 2 Furniture Charges (one time) 6,840 0 0 Hostel Security (one time) Refundable 3 9,580 **Total of One time Charges** 17,490 0 **Regular Charges** 4 Room Rent (per semester) 9.000 9.000 8.000 8.000 5 Amenities to Boarder Students (per semester) 13,000 13,000 6 Hostel Utility Charges (per semester) **Total of Regular Charges** 30,000 30,000

Total (Rs.)

1. The Undergraduate Students enrolled in evening Classes on Self Supporting basis in following Degree Programs shall pay Rs. 75,000/- per Semester in addition to normal fee and other dues.

Doctor of Veterinary and Medicine (DVM) BS Human Nutrition and Dietetics

Doctor of Pharmacy (Pharm-D) BS Medical Laboratory Technology

BS Applied Microbiology

30,000

2. The Undergraduate Students enrolled in evening Classes on Self Supporting basis in following Degree Programs shall pay Rs. 30,000/- per Semester in addition to normal fee and other dues.

BS Applied Microbiology

BS Biotechnology

BS Biochemistry

47,490

BS Environmental Sciences

 $BS\,Food\,Science\,and\,Technology$

BS Biological Sciences

- 3. Children of Overseas Pakistanis and Children of Veterinary / Poultry Industrialist / Pharmaceutical Industrialist shall deposit Rs. 1,200,000/- in the shape of pay order in favour of the Treasurer, University of Veterinary and Animal Sciences, Lahore along with application form. In addition to above, the concerned student will also pay normal fee and other dues per semester.
- 4. The students enrolled in Veterinary Disciplines shall pay Rs. 1200/- as Pakistan Veterinary Medical Council Registration Fee (PVMC) & Pocket Size ID Card in addition to normal dues.
- 5. The students enrolled in Pharm-D Degree Program shall pay Rs. 1,000/- as Registration Fee of Pharmacy Council of Pakistan.
- 6. All the newly admitted students are required to deposit Rs. 4,400/- as Certificate Verification Charges in 1st Semester in addition to above mentioned dues.
- 7. As per Notification No. B&F/ 4013 dated 10-07-2020, 15% of Examination Fee additionally will be charged from the students of all affiliated institutes/colleges as per fee schedule of their Academic Session.

^{*} The university reserves the rights to increase the fee from 10% to 15%, if required, in next semesters.

	Fee for Internationa	l Students	
Sr. No.	Region	Standard Fee	% of Fee Waiver
1.	Developed Countries	10,000 US\$ (One time)	No Waiver
		and Normal Semester/	
		Hostel Dues	
2.	Gulf Countries	10,000 US\$ (One time)	Only Waiver of
		and Normal Semester/	Upto 5,000/- US\$
		Hostel Dues	
3.	Under Developed Countries	10,000 US\$ (One time)	Waiver of Up to 10,000/-
		and Normal Semester/	US \$ and Normal
		Hostel Dues	Semester/ Hostel Dues

Other Charges for the Academic Session Proposed for 2023-24

Sr. No.	Particulars	Rs.
1	Re-Admission Fee	6000
2	Re-Registration Fee	1000
3	Fine for Late Deposit of Fee per day	200
4	Ph. D Thesis Fee	27500
5	M. Phil Thesis Fee	5500
6	Restoration of Cancelled Hall Seat	2000
7	Degree in Absentia, Non Convocation Before Time Degree	2800
8	Detailed Marks/Transcript Per Semester	300
9	Migration Certificate	2800
10	Duplicate Degree/Certificate	5500
11	Duplicate Provisional Certificate/Migration Certificate	5500
12	Duplicate Copy of Registration Card/Roll No.	600
13	Fee for Re-Checking of Answer Book per Paper	600
14	Verification of Degree/Certificate per copy	300
15	Verification of Transcript per page	200
16	Character Certificate	300
17	Medium of Instruction Certificate Fee	300
18	Correct of Name Fee	3000
19	Ph. D Comprehensive Examination (Written Part)	5500
20	Ph. D Comprehensive Examination (Oral Part)	5500
21	Provisional Certificate (All Degrees)	200
22	Diploma Certificate	1100
23	Duplicate Comprehensive Detailed Marks Certificate	600

	For Urgent	t Processing:-				
24	Degree in Absentia Before Time Degre	, Non Convocation e	5600			
25	Provisional Certific	ate (All Degrees)	400			
26	Detailed Marks/Transcript Per Semester					
27	Migration Certifica	te	5600			
28						
29	Verification of Degree/Certificate per					
30						
Sr. No.	BBA I	Morning	Rs.			
1	Semester I		73,240			
2	Semester II, III & IV	55,400				
3	Semester V, VI & VII each					
4						
5	Total Fees for all semesters(I-VIII)					
		inesters(i viii)	488,070			
Sr. No.		Evening	Rs.			
Sr.			Rs.			
Sr. No.	ВВА	Evening	Rs. 75,870			
Sr. No.	BBA Semester I	Evening / each	Rs. 75,870 60,940			
Sr. No. 1	Semester I Semester II, III & IV	Evening / each	Rs. 75,870 60,940 70,850			
Sr. No. 1 2 3	Semester I Semester II, III & IV Semester V, VI & V	Evening / each II each				
Sr. No. 1 2 3 4 5	Semester I, III & IV Semester V, VI & V Semester VIII Total Fees for all se UG Admi VAS FEE REFUNI LEVEL FEE-REI	Evening / each II each	Rs. 75,870 60,940 70,850 60,940 532,180			
Sr. No. 1 2 3 4 5	Semester I, III & IV Semester V, VI & V Semester VIII Total Fees for all se UG Admi VAS FEE REFUNI LEVEL FEE-REI	Evening / each II each emesters(I-VIII) ssions 2023 D POLICY/NATION FUND POLICY AT	Rs. 75,870 60,940 70,850 60,940 532,180			
Sr. No. 1 2 3 4 5	Semester I Semester II, III & IV Semester V, VI & V Semester VIII Total Fees for all se UG Admi VAS FEE REFUNI LEVEL FEE-REI HEC INSTITUTION	Evening / each II each emesters(I-VIII) ssions 2023 D POLICY/NATION FUND POLICY AT ONS OF PAKISTAN Timeline for	Rs. 75,870 60,940 70,850 60,940 532,180 AL System of			
Sr. No. 1 2 3 4 5	Semester I Semester II, III & IV Semester V, VI & V Semester VIII Total Fees for all se	reach II each emesters(I-VIII) ssions 2023 D POLICY/NATION FUND POLICY AT ONS OF PAKISTAN Timeline for Semester/Trimester Up to 7th day	Rs. 75,870 60,940 70,850 60,940 532,180 AL System of classes Day of			

STATUES & REGULATIONS

In these statutes unless there is anything repugnant in the subject or context.

1. Definitions:

- a. "Council" means the Academic Council of the University of Veterinary & Animal Sciences, Lahore.
- b. "Course" means the course of study as prescribed in scheme of studies of DVM and Pharm-D degree Programs to be completed in a minimum of five years and maximum of seven years study and a minimum of four years and maximum of six years study for BS degree programs.
- c. "Credit Hour" means the study and successful completion of a course of one hour per week per semester in theory or two hours per week per semester in a practical for all undergraduate degree programs except the degree of Pharm-D. i.e., the study and successful completion of a course of one hour per week per semester in theory or three hours per week per semester in practical.
- d. "Semester" means teaching time of twenty weeks inclusive of admission, conduct of examination, preparation and declaration of results, gazetted holidays etc.
- e. "Syllabus and Curriculum" means the syllabus and curriculum for a course of studies prescribed by the Academic Council.
- f. "Veterinary Hospital or Institution" means teaching and non-teaching Veterinary Hospital or Institution relevant to Livestock Health, Production or Technology or whatever name called and approved as such by the Council.
- g. "Internship Program" means to provide pre-service field training in the areas of Veterinary Medicine, Animal Husbandry and allied fields to the DVM students. The student shall spend a total of one semester at designated teaching Hospitals, Livestock and Poultry Farms (Govt. and private), Disease Diagnostic Laboratories and other relevant installations, milk plants, feed mills, abattoirs, farmers cooperatives etc. (Govt. and private); where they shall undertake skills and management development training. After the completion of the term of internship, the students shall be required to submit a report, seminar presentation, and viva voce examination.
- h. For DVM Degree Program, the student shall be graded as "S" (Satisfactory) or "NS" (Not satisfactory) based on his / her attendance, report, seminar presentation and viva voce.

2. Duration of the Course

- a. The DVM and Pharm-D degrees will consist of a scheme of study, curriculum and syllabus spreading over the period of minimum 5 academic years and the degree shall be awarded after successful completion of credit hours mentioned in scheme of study for each course; and the B.S.(Hons.) degree programs will consist of minimum 4 academic years and degree will be awarded after completion of credit hours mentioned in scheme of study for each course.
- b. In case of DVM degree, the minimum number of

- semesters for completing DVMshall be ten regular semesters, including a compulsory internship / training which shall be in tenth semester. Provided that in case a student does not qualify for the award of degree within the minimum period of ten semesters, he /she may continue his / her studies for a maximum of four more consecutive semesters (up to fourteen semesters, beyond which he / she shall not be eligible for enrollment). During internship, there shall be training in a teaching Veterinary Hospital, Livestock / Poultry Farm and Field training in Veterinary Production and Health.
- **c.** The medium of instruction and examination shall be English, except the course of Islamic studies, which shall be in Urdu as well as in English.

3. Duration of Semester

- a. There shall be two semesters in each academic year (Semester- I & Semester- II) of 20 weeks each. Out of 20 weeks 16 weeks shall be the actual teaching time, the rest may be utilized for admission, conduct of midterm & final examinations, preparation and declaration of results and a one week semester break.
- b. There shall also be a Semester-III as part of an academic year and shall be optional. Students, who wish to pass "F" grade(s) and to improve "D" grade(s) for DVM & B.S.(Hons.) and "C" grade(s) for Pharm-D Degree, may enroll this semester in the course(s) offered. It shall not count towards residential requirements.

4. Scheme of Study

The scheme of study for each degree program has been given at the end of each degree program. This schedule may be amended from time to time by the concerned authority.

5. Curriculum and Syllabus

Regulations

The curricula and syllabi may be amended by the concerned authority as and when a need arises.

Admission Requirements

Only those candidates shall be admitted to these degree programs, who have passed:

- **a.** The Higher Secondary School Examination.
- **b.** Intermediate or pre-degree examination in science from a recognized University or Board with Physics, Chemistry, Biology or Mathematics (where indicated) & English.
- c. Any other examination having the scope and standard equivalent to the Intermediate Sciences Examination of a Pakistan University or Board with Physics, Chemistry, Biology or Mathematics (where indicated) and English.

1. Selection of Students

The selection of students for these degree programs shall be purely on merit.

Explanation

Eligibility criteria for admission in Undergraduate Degree Programmes at this University and at its constituent colleges/affiliated institutions for the year 2022 only:-

1. Candidates securing at least 60% marks (excluding Hafiz-

e-Quran) in F.Sc (Pre-Medical) or any other equivalent examination from a recognized Board/University can apply for admission for all degree programs DVM, Pharm D, B.S. (N&D), B.S. (Applied Microbiology), B.S. Biotechnology, B.S. Biochemistry, B.S. (FST) and B.S. (MLT). Candidates securing at least 45% marks (excluding Hafiz-e-Quran) in F.Sc (Pre-Medical) or any other equivalent examination from a recognized Board/University can apply for admission in B.S. (Hons.) Fisheries & Aquaculture, Biological Sciences, Poultry Science, Dairy Technology and Botany. Candidates possessing F.Sc (Pre-Eng.) can also apply for BS (Hons.) Environmental Sciences and BS (Hons.) Dairy Technology, Zoology, and BBA. However, Students having I.Com, ICS, F.A. are eligible to apply for BBA degree program.

Final Merit will be determined as under:

- The final merit will be based on marks obtained in Matric / O-Level or any other equivalent examination and F.Sc / A-Level or any other equivalent examination:
 - Weightage: F.Sc (70%) and Matric (30%)
- 2. This policy will be for all degree programmes for this year only.
- 3. During the admission the merit of students having same marks / percentages will be decided as follows:
- In case; if two students having same marks / percentage; merit will be given to the student who has higher age.
- In case both students having same date of birth, the student having greater marks in matriculation will be given merit.

2. Age

A candidate must not be over 23 years of age on the last date of admission.

3. Number of Students to be admitted

The Academic Council shall determine the number of students to be admitted in all degree Programs for each year's academic session.

4. Authority of Admission

The admission shall be made by the undergraduate Admission Committee which would be all Deans of Faculties / Principal.

5. Time for Admission

- **a.** Candidate shall be admitted at the beginning of the Semester-I. If a candidate fails to enroll in time, his / her admission shall stand cancelled.
- **b.** The Dean / Principal may refuse admission of a student without assigning any reason.

Enrolment

 A candidate shall, for so long as he / she has not completed all the requirements of the degree, enroll himself / herself for each forthcoming semester subject to the maximum admissible limit of 14 semesters in case of DVM and Pharm-D and 12 semesters in case of other B.S.(Hons.) degrees and the summer session immediately following the last semester; failing which his/her admission shall stand cancelled.

2. In case a student discontinues without permission, he / she may seek re-admission in the same semester next year, with the approval of the Vice-Chancellor on the recommendation of the Dean / Principal or subsequent year with the permission of the Academic Council; provided that he / she has not exhausted the maximum residential requirements.

Clarification of Statutes 2(b) and Regulation III (1)

The semesters provided in excess of the normal duration of the course have to be treated as exactlyidentical to the original ten and eight for five and four Years Degree Programs, respectively in matter of regulating the course conduct.

This provision does not place any bar on the students' right to discontinue their studies during these extra four semesters. But what is inviolable in their case is their consecutive nature. One cannot skip a semester during this extra period and recover it beyond the last semester after it has ended. Next summer shall be considered as a terminal summer for such a candidate. For instance, if a student discontinues his / her studies in the 2nd last semester and the course in question is not offered in the next last semester, he / she cannot claim a right to enroll in the further next semester, except that he / she avails himself / herself of the terminal summer session. He / she shall have come to the end of his /her degree program.

3. An application for enrolment on the prescribed form (UG-I) accompanied by the prescribed fee receipt, shall be presented by the regular students on the days notified for this particular purpose: provided that the Dean concerned / Principal may in special circumstances and on payment of a late fee of Rs.3000/-, permit a student to enroll within 7 days after the commencement of the semester; provided further that the Vice-Chancellor may allow enrolment of a student after the expiry of 7 days of the commencement of the semester under special circumstances of the individual cases to be recorded in writing with double late fee till such time as it does not conflict with the prescribed requirement of seventy five percent attendance in lecture and practical classes of each subject. Provided further that the students seeking admission for the first time in first degree courses must complete all admission / enrolment formalities within the date notified by the Dean of concerned faculty / Principal; failing which admission of such students may be allowed in consultation with the Vice-Chancellor till such time as it does not conflict with the prescribed requirements of 75% attendance in Lectures and Practical of each subject.

EXPLANATION:

Enrollment will only be considered "complete" when the enrolment form (UG-1) after uploading information in computer, complete in all respect, is submitted to the Dean of Faculty / Principal of College. Merely depositing of fee will not serve the purpose.

7. Withdrawal of the Course(s)

A student may be allowed to **change** the course(s) within 7 days of the commencement of the semester and to **withdraw** a course within 5 weeks of the commencement of the semester with the consent of the Advisory Committee.

8. Minimum and Maximum Credit Hours for 5 years degree Programs:

Each student shall enroll himself / herself in the first and second Semester for all the credit hours prescribed for these semesters. Subsequently, he / she shall have to enroll for courses carrying not less than 17 and not more than 27 credit hours. The students who wish to pass "F" and to improve "D" grade (s) (grade "C" for Pharm-D) may enroll during the Semester III for not more than 12 credit hours. In his / her last semester, i.e. in case of odd 9th and 8th in case of even, a student may enroll himself / herself for the courses carrying the remaining credit hours; provided that the maximum does not ordinarily exceed 30 credit hours. Provided further that the Dean of Faculty / Principal of College may allow a student to exceed a maximum limit of 30 credit hours by 1 to 4 credit hours, by which he / she may be falling short of total prescribed credit hours of course, in special circumstances to be determined carefully in each individual case. These extra credit hours shall be allowed only in the 8th and 9th semester.

In the case of semester III, the limit will be 12 credit hours; provided further that the Dean of Faculty may allow a student to exceed this limit of 12 credit hours to 16 credit hours of failed courses only by which he / she may be failing to complete the degree program. Provided further, no course shall be offered during the regular semester which does not fall within the "Scheme of Studies" in respective semester.

Clarification of Regulations

- 1. Regular Semesters, i.e. Semester I & II
- a. Each student shall enroll himself / herself in the first and second semesters for all the credit hours prescribed for those semesters.
- **b.** Subsequently, he / she shall have to register for courses carrying not less than 17 and not more than 27 credit hours.
- c. In his / her last semester (9th in case of odd courses and 8th in case of even courses), a student may enroll himself / herself for courses carrying the remaining credit hours i.e. up to 30 credit hours. This limit may be extended by

the Dean of Faculty up to 34 credit hours in 9th Semester if no course of odd Semester is left behind. Similarly, he / she may enroll up to 34 credit hours in 8th Semester if no course of even Semester is left behind and student will complete the degree program after Enrolment of these extra credits.

2. Semester III

- a. During any Semester III, normally a student may enroll 'F' and 'D' grade courses (grade "C" for Pharm-D) up to 12 credit hours. In Semester-III following 10th, 12th and 14th regular semesters, a student may enroll failing courses only up to 16 credit hours provided that he / she will not be entitled to enroll any 'D' grade course(s) (grade "C" for Pharm-D).
- b. After 9th regular semester, if a student has yet to clear failing courses of more than 16 credit hours, he / she will enroll up to the normal limit of 12 credit hours only, which may include 'F' and 'D' grade course(s) (grade "C" for Pharm-D). He / she will enroll the remaining courses in the forthcoming regular i.e., Semester-I, Semester-II and Semester-III following thereafter as per "Scheme of studies".

9. Minimum and Maximum Credit Hours for BS-Hons. (Four Year) Degree programs:

Each student shall enroll himself / herself in the first and second Semester for all the credit hours prescribed for these semesters. Subsequently he / she shall have to enroll for courses carrying not less than 15 and not more than 22 credit hours. In his /her last semesters, i.e., in case of odd 7th & 8th in case of even, a student may enroll himself / herself for the courses carrying the remaining credit hours; provided that the maximum does not ordinarily exceed 24 credit hours. Provided further that the Dean / Principal may allow a student to exceed a maximum limit of 28 credit hours by 1 to 4 credit hours, by which he / she may be falling short of total prescribed credit hours of course, in special circumstances to be determined carefully in each individual case. These extra credit hours shall be allowed only in the 7th and 8th semester.

The students who wish to pass "F" and to improve "D" grade (s) may enroll during the Semester III for not more than 12 credit hours. However, the Dean / Principal may allow a student to exceed this limit of 12 credit hours to 16 credit hours of failed courses only by which he / she may be failing to complete the degree program. Provided further that no course shall be offered during the regular semester, which does not fall within the "Scheme of Studies" in respective semester.

Clarification of Regulation

1 Regular Semesters, i.e. Semester I & II

- **a.** Each student shall enroll himself / herself in the first and second semesters for all the credit hours prescribed for those semesters.
- **b.** Subsequently, he / she will have to register for courses

carrying not less than 15 and not more than 22 credit hours.

c. In his / her last semester (7th in case of odd courses and 8th in case of even courses), a student may enroll himself / herself for courses carrying the remaining credit hours i.e. up to 24 credit hours. This limit may be extended by the Dean / Principal, up to 28 credit hours in 7th Semester if no course of odd Semester is left behind. Similarly, he / she may enroll up to 28 credit hours in 8th Semester if no course of even Semester is left behind and student will complete the degree program after enrolment of these extra credits.

10. Semester III

- **a.** During any Semester III, a student may enroll 'F' and 'D' grade courses up to 12 credit hours.
- **b.** In Semester III following 8th, 10th, and 12th regular semesters, a student may enroll failing courses only up to 16 credit hours provided that he / she will not be entitled to enroll any 'D' grade course(s).
- c. After 8th regular semester, if a student has yet to clear failing courses of more than 16 credit hours, he / she will enroll up to the normal limit of 12 credit hours only, which may include 'F' and 'D' grade course(s). He / She will enroll the remaining courses in the forthcoming regular i.e. Semester I, Semester II and Semester III following thereafter as per "Scheme of Studies".

Improvement of Grades

- a. In semester III or in any of the subsequent semesters, a student may repeat once those courses of previous semester(s) in which he / she had secured the lowest grade i.e. "D" ("C" for Pharm-D) only.
- b. Any improved grade will substitute "F" and "D" ("C" for Pharm-D) grades and will form a permanent part of the transcript.

Examination and Weightage

- a. A mid-term examination of one hour duration will be held during 9th week of the semester, which shall carry 30% of the total marks allocated for the course. This examination shall be conducted by the teacher concerned who shall determine form of the examination.
- b. In addition, quizzes, special home assignments and /or term papers shall carry 10% of the total marks allocated for the course which shall be uniformly split over the whole semester.
- **c.** The final examination shall be held at the end of the semester and shall carry 60% of the total marks allocated for the course.
- **d.** For the purpose of evaluation, one credit hour shall carry

20 marks e.g. five credits' course shall carry 100 marks. These marks shall be divided in accordance with the credit(s) assigned to theory/practical for each course.

e. One hour of theory shall be equivalent to two hours of practical in term of marks.

Uniformity / Standards in Tests

In each Department / College, the respective Board of Studies shall maintain and examine all problems regarding uniformity/standards in tests, examinations and assignments, etc. Before the declaration of results of the semesters, any appeal from the student(s), teacher(s) or any other related matter shall be discussed in the Board of Studies and the decision of the Board shall be final. The students will be permitted to go through their answer books in the presence of the teacher concerned within 3 days after the award list is displayed on the Notice Board.

Practical Examination

Each laboratory experiment, exercise, surgical operation etc. shall be considered Practical examination and 80% marks shall be assigned for overall general performance during the semester and 20% for the final examination.

Declaration of Results

- 1. The teachers may upload results (awards) of the courses offered by them in computer in consultation with Director, I.T. and get print(s) of award list(s). The final award list(s) signed by the teacher will be sent to the office of the Controller of Examinations, accordingly; who will get them verified in accordance with the marks uploaded by the teachers. Have the award list(s) been synchronized with the marks uploaded; these will be saved in system.
- 2. For each subject, one copy of the award list shall be forwarded to the Chairman of the Department and Dean of Faculty concerned.

Minimum CGPA requirements for the award of DVM, Pharm-D. and B.S. (Hons.) degrees is 2.5. Minimum requirement to promote in each semester is as under

Semester	GPA / CGPA	Semester	GPA / CGPA
T	1.00	5	1.40
2	1.00	6	1.50
Summer	1.00	Summer	1.50
3	1.20	7	1.75
4	1.30	8	2.00
Summer	1.30	Summer	2.00

After summer session following 8th and up to 12th semester for Four Years Degree Program and 10th and up to 14th semester for Five Years Degree Programs, a student must obtain at least CGPA of 2.00 for his enrollment in subsequent semesters.

A student, who obtains CGPA of 2.00 but less than 2.50 on

the completion of entire course work, may be allowed to repeat once the courses of the previous semesters in which he / she has obtained the lowest grades, in order to improve the CGPA so as to obtain minimum CGPA of 2.50 failing which he / she shall not qualify for the award of degree.:

GPA/CGPA

GPA/CGPA shall be calculated at the end of each semester in accordance with the relevant Rules & Regulations.

Minimum Passing Marks

In order to complete a course successfully, a student is required to obtain at least 40% marks each in Theory and Practical, separately for DVM, B.S. (Hons.) degrees and 50% marks each in Theory and Practical, separately for Pharm.D degree.

Grade Point Average (GPA)

a. "A" grade carries 4 quality points; whereas, B, C, D & F grade carry 3, 2, 1 and zero quality points, respectively, as mentioned below:

For Pharm D. Degree program, grade 'D' will be considered fail **(F)**

Grade	Value	Marks	Remarks
Α	4	80 - 100%	Excellent
В	3	65 - 79%	Good
С	2	50 -64%	Satisfactory
D	1	40 -49%	Pass
F	0	Below 40%	Fail

- b. Maximum GPA / CGPA 4.00
- c. Minimum CGPA for obtaining Degree 2.50
- d. The grade point or quality point will be worked out on the basis of percentage of marks obtained by a student in each course separately according to a conversion table and not on the percentage of total marks obtained by a student.
- e. The conversion table is available at the University website.

Attendance Requirements

- a. A candidate having less than 75% of the attendance both in theory and practical separately in each course shall not be allowed to take the final examination of the course in a semester provided that the period of absence in case of participation in extracurricular/sports activities, with the permission of Senior Tutor /Director Sports shall be condoned.
- b. The teacher concerned shall send a statement of weekly attendance of students in each course, theory and practical, separately on the prescribed form, to the Chairman of the Department. The Chairman of the Department will send the monthly attendance to the Dean / Director / Principal. The name of the student, who remains absent from the classes continuously for two weeks without prior permission of the competent authority, shall be struck off on the rolls of University / College by the Dean / Director / Principal.

Conduct of Examination

Examination system will be implemented with following directions:

- 1. Results of mid-term examination will also be submitted to the Dean of the concerned Faculty and Chairman of the concerned Department within 7 days of examination. Four working days are meant for checking of answer books, while last 3 working days are exclusively specified for showing the papers to the students. This is a mandatory requirement. The Chairman of the concerned Department is required to adopt necessary measures where students feel free to discuss the marks awarded with the concerned teacher.
- 2. A Grievance Committee will be constituted in each Faculty to address the issues of the students relating to their paper markings.
- 3. Results (both mid and final term) should be displayed on the notice board of the Department.

1. Examination date-sheet for each degree program (practical and theory) may be prepared

separately and circulated / displayed by the Dean of concerned Faculty.

If a student enrolled in a semester has discontinued or is unable to sit in the final Examination due to illness duly certified by a Registered Medical Officer or under the circumstances beyond his / her control, to be determined in each case, on a written application by the student, may be allowed to discontinue which would be duly notified by the Dean / Director. He / she will be awarded "W" (withdrawal) grade provided he / she has attended the lectures by 75% or more. He may, however, enroll in the same semester the following year, with the permission of the Dean / Director or the subsequent year but with the permission of the Academic Council. A student who has shortage of lectures by 75% cannot avail this facility.

Script of Examination

- a. The script of each final examination shall be shown to the students by the concerned teacher, taken back and then forwarded to the Controller of Examinations, who shall preserve the scripts for a year. If a mistake or a discrepancy in the marking of the scripts of a serious nature comes to the notice of the Controller of Examinations, he shall take action to get it rectified in a suitable manner after obtaining proper orders from the Vice-Chancellor.
- **b.** The grade mentioned on the answer script shall be as follows:

A, B, C, D, F*, W** & I***

F* Fail : No shortage of lectures but securing less than 40% and 50% marks either in practical or theory separately or combined in DVM / B.S. (Hons.) and Pharm-D degree programs, respectively.

W Withdrawal:** (Discontinued during the final examination but no shortage of lectures)

I*** incomplete: (Shortage of lectures-less than 75%)

The students with "F" (fail) or "W" (withdrawal) grade(s) may repeat the course(s) in either the semester III or the forthcoming regular semester I & II; whereas grade "I" (Incomplete) has to repeat the course with the regular class of the forthcoming regular semesters I & II, not in the semester III.

Calendar of Events

Events	Duration (in Weeks)	
a. Semester -I	20	
b. Semester -II	20	

Constitution of Advisory Committee

The Dean / Director / Principal, shall constitute Advisory Committee consisting of Senior Tutor and the concerned tutors in each respective class, who are responsible to provide adequate counseling and guidance to the students and a signatory body for enrolment forms. The advisory committee shall also be responsible to look whether the credit hours are according to the Rules and Regulations as mentioned in the scheme of studies of each degree course.

Regulations Relating to Grant of Exemption from Examination on Ground of Ilness and other Reasons

If a candidate is unable to appear in the Examination for any of the following reasons:

- 1. Serious illness
- 2. Serious injury due to accident.
- 3. Death of a near relative (Grand Father, Grand Mother, Father, Mother, Sister, Brother) on the day of the examination.
- 4. His / her selection for or participation in an international sports contest as a national representative.
- 5. In case of death of spouse (husband / wife) of the student.
- **a.** Undergraduate Student shall be permitted to appear in Midterm Examination by the concerned Dean on the recommendations of the Teacher concerned.
- **b.** The student shall be permitted to appear in the Final Term Examination by the Vice Chancellor on the recommendations of the Dean concerned.
- c. The concerned Dean will notify the date of examination.

NOTE: The missed examination will be conducted before the start of next semester.

- 2. The applications of such candidates for missed Midterm Examinations shall be submitted to the Dean concerned through the concerned Teacher and for missed Final Term Examinations shall be submitted to the Vice Chancellor through the Dean concerned not later than the 7th day from the date of missed Examination.
- 3. Such application must be certified by the Dean of Faculty that the candidate had a reasonable chance of success if he had appeared in the Examination and that the

- candidate could not appear in, or complete the Examination without great danger to his / her health, or other reason recorded above and it was physically impossible for the candidate to appear in, or complete the Examination.
- Certificate of illness must be supported by a Registered Medical Practitioner and countersigned by Resident Medical Officer of University of Veterinary & Animal Sciences, Lahore.
- 5. Applicant will provide death certificate of near relative with application.

Instructions for obtaining different certificates

Provisional Certificate

Application for Provisional Certificate should be accompanied by the following documents.

- **1.** Complete E-44 form *i.e.* clearance certificate from the concerned Departments / persons.
- **2.** Fee will be charged for the issuance of provisional certificate as notified by the office of the Treasurer from time to time.
- **3.** Make an extra photocopy of the complete E-44 form for the purpose of character certificate.
- **4.** Deposit E-44 in original along with original bank receipt in the office of the Controller of Examinations.
- **5.** Membership of Alumni Association is mandatory before to issue a Provisional certificate.

Detail Marks Certificate

Application for Detail Marks Certificate should be accompanied by the following documents:

- **1.** Certificate 'A' signed by Dean of the Faculty / Director / Principal.
- 2. Clearance from the Fee Clerk.
- 3. Clearance from Hostel Warden.
- 4. Clearance from Head of Department / Library.

Character Certificate

Application for Character Certificate accompanied by the following documents should be submitted in the office of the Dean / Director / Principal:

- **1.** Photocopy of complete E-44 form along with photocopy of Provisional Certificate (original for verification).
- 2. Bank Challan of fee prescribed

Please visit www.uvas.edu.pk for further details on these policies.

Administration



ADMINISTRATION

Registrar Office

Mr. Sajjad Hyder (Registrar)

Ms. Nazia Sultana (Deputy Registrar-SR/Coord.)

Mr. Amjad Mehmood (Deputy Registrar-Gen)

Mr. Zulfiqar Dogar (Deputy Registrar)

Mr. Irfan Chohan (Deputy Registrar)

VC Secretariate

Mr. Muhammad Irfan Najmi (Secretary to VC)

Treasurer Office

Mr. Muhammad Umar (Deputy Treasurer-

Additional Charge of Treasurer)

Mr. Ch Muhammad Shafique (Deputy Treasurer)

Mr. Shahid Mehmood (Deputy Treasurer)

Controller of Examinations Office

Mr. Syed Zargham Hyder (Controller of Examination)

Quality Enhancement Cell (QEC)

Dr. Dawar Hameed Mughal (Director)

Ms. Mubashara Aftab (Deputy Director)

Directorate of Advanced Studies

Dr. Sakhara Mehmood (Director)

Plant for Pakistan

خدا کی شکر گزاری کریں شجر کاری









UVAS 24/7 Extensions Service



For Well-Being of Farming Community

SERVICES

OFFICE OF RESEARCH, INNOVATION AND COMMERCIALIZATION (ORIC)



International Exchange Linkages Program

Directorate of External Linkages (DEL) facilitates and strengthens the UVAS partnership with external stakeholders including international & local universities, public and private sectors, research and technology organizations and social community. The objective is to synergize the intellectual and physical resources for socio-economic growth and strategic capacities using University-Industry collaboration as leverage.

Till date, the directorate has signed 123 National and 67 International MoUs with various universities, institutions and private organizations.

Summary of linkages in the last year is as under,

Dr. Farhan JamilDirector

Dr. Muhammad Faiz Rasool
Assistant Director
External Linkages
(Focal Person for
Foreign Students)

International

1.	Global Health Alliance
2.	Universiti Sains Malaysia
3.	Chungnum University, Korea
4.	Royal Group, China
5.	Dalum Academy of Agriculture Business, Denmark
6.	Melbourne University, Australia

National

1.	Fatima Jinnah Medical University, Lahore
2.	Bird Inn Poultries (Pvt) Ltd
3.	University of Management & Technology, Lahore (Textile Department)
4.	Combined Military Hospital (CMH), Lahore
5.	Provincial Disaster Management Authority (PDMA), Punjab
6.	Lahore Cattle Market Company
7.	Dairy Lac (Pvt) Ltd
8.	Project Management Unit, Khyber Pakhtunkhwa
9.	Awami Laboratories
10.	One Health Alliance, Islamabad
11.	UM Enterprises

Business Incubation Centre, UVAS is working vigorously to enchanter the environment of entrepreneurship in the university, since its inception in 2011 as the fifth model incubator of the country. This office provides a platform to explore & nurture the young business aspirants to become entrepreneurs. We provide all the technical & official support to the students who want to be their own boss.



Business Incubation Center (BIC)

Dr. Muhammad Hayat JaspalDirector (Additional Charge) **Mr. Qaisar Hussain**Deputy Director

Directorate of University Advancement and Financial Aid (DUAFA) has three offices Office of Career Services (CS)

Office of Career Services aim to bridge the gap between university, job market and the alumni in order to create endless employment opportunities for UVAS graduates. This office provides counseling to students so that they can pave their career path perfectly.

Office of Financial Aid (FA)

This office offers following scholarships/support:

Merit Scholarships, Need Based Scholarships, Zakat Based Scholarships, and Financial Support.

Every 6th student at UVAS is a scholarship holder.

Office of University Advancement (UA)

University Advancement aims to show all stakeholders a clear, consistent and focused message about the university's mission, goals, priorities and performance that will increase public understanding about the university.

Benazir Undergraduate Scholarship Project (BUSP) at UVAS

UVAS in collaboration with Higher Education Commission (HEC) and Benazir Income Support Program (BISP) is offering "Benazir Undergraduate Scholarships" for qualified students from low-income families who are unable to continue their studies due to the lack of financial means. 50% scholarships are reserved for girls, whereas 2% scholarships are reserved for disabled students who aspire to undertake university education.

DIRECTORATE OF UNIVERSITY ADVANCEMENT AND FINANCIAL AID (DUAFA)

Dr. Muhammad Hayat Jaspal
Director (Additional Charge)
Mr. Muhammad Awais Asif
Assistant Director (Career Services)
Mr. Qaisar Hussain
SFAO (Additional Charge)
Mr. Qasim Hussain
Assistant Director
(University Advancement)

Make a Choice
SUCCESS
in Life or
DRUGS





Prof. Dr. Kamran Ashraf
Principal Officer Student's Affairs
Dr. Muhammad Asad
DSA, City Campus, Lahore
Dr. Qaiser Akram
DSA, KBCMA, Narowal

Dr. Khurram Waqas
Associate DSA, City Campus, Lahore
Dr. Huma Mujahid
Associate DSA, City Campus, Lahore
Prof. Dr. Muhammad Hassan Saleem
DSA, Ravi Campus, Pattoki
Dr. Ishtiaque Ahmad
Associate, DSA, Ravi Campus, Pattoki

Disability Coordinators

Ms. Rabia Khokar
Lecturer Institute of Microbiology
Dr. Muhammad Asif Ali
Lecturer Department of Food Sciences &
Human Nutrition

The office of Director Students Affairs is responsible for academic advising and support services delivery at University. An important function of this office is to promote extracurricular activities amongst the students, provide them healthy outlets in sports and games, furnish them forums for cultivation of literary and artistic potentialities and make their stay on the campus a rich experience of multi-dimensional growth. Various societies work to explore ways to enhance or address aspects of the entire student experience, from education to student life to career planning, and works with students to develop innovative solutions to issues and concerns. The Staff is equipped to help students through effective guidance and counseling. The representing counters/ common rooms/student teacher center are being established here to facilitate the students to address their queries and concerns.

The major responsibilities of this office include:-

- 1. Time Table preparation.
- 2. Preparation of Semester Schedule.
- 3. Preparation of Date Sheets.
- 4. Guidelines and queries related to scholarships.
- $5.\,Is suance\,of\,Character\,Certificate.$
- 6. Issuance of Bonafide Certificate.
- 7. Orientation of 1st year class.
- 8. Nomination of participants in the student's convention.
- 9. Maintenance of Discipline on Campus.
- 10. Regular monitoring of Lecture Rooms and other facilities.
- $11.\,Day\,to\,day\,Student\,Problems\,and\,their\,Solutions.$
- 12. Arranging Co-curricular and Extra-curricular Functions at the University.
- 13. Monitoring of Study Tours of Final Year Class.
- 14. Provide Students with Healthy Outlets in Sports.
- 15. Contribution to Institutional Policy Development in relevant areas.

Office of Senior Tutor is one of the imperative components of student affairs and is responsible to inculcate highly commendable spiritual, social and moral values and a leadership quality in its taught. It organizes co-curricular activities for students at the campus. This Office has embarked upon a solid system which includes: Tutorial group meeting (TGM), Proctorial board and student societies that includes Qira'at & Naat Society, Debating Society, Quiz Club, Drama society "NATAK MANDLI", Literary Society "QIRTAS", Character building Society, Musical Society, Still and Film Society, IDEAS, Society for conservation of environment and nature, Vet crescent society, Vets care club, SAVERS, SKZ, UVAS media club, Food and Nutrition society, CEMS, UVAS Quiz Club, The Artistry Hub and Blood Donor Society. This office fosters essential student welfare services in association with student's record branch. In addition an extensive tutorial group system has also been working under this office in which individual tutors meet their group students on Thursday every week to conduct healthy activities within groups to prepare a nursery of best performers at the University and inter-varsity levels.

This office is earnestly striving with the aim that the social and ethical uplift of our youth will not only help them to discover/polish their hidden talents, rather, contribute to a health community in the long run. To provoke the leadership potential in the students, Senior tutor office maximizes participation of volunteers in the management of various events at the university through a well-defined proctorial system. The development of Student Counseling Center is underway to broaden the vision of the students through their study or future work perspectives. One of devoted mission of this office is to look forward that our students enthusiastically participate in all creative activities updated on the event calendar from time to time. Moving with a positive outlook, this will lead our youth to excel during studentship with distinctive contributions as useful citizens of a healthier and peaceful society ahead in life.

OFFICE OF THE SENIOR TUTOR

Prof. Dr. Ali Raza Awan Senior Tutor, City Campus, Lahore Dr. Muhammad Junaid Senior Tutor, Ravi Campus, Pattoki

Dr. Muhammad OneebAssociate Senior Tutor, City Campus, Lahore

Dr. Syed Aun MuhammadAssociate Senior Tutor, CVAS, Jhang **Dr. Ali Ahmad**Associate Senior Tutor, KBCMA Narowal





DIRECTORATE OF INFORMATION **TECHNOLOGY (DIT)**

Mr. Muhammad Rizwan Saleem Director IT

Mr. Imran Youns Chohan

Network Manager

Mr. Yasir Ameen

System Manager

Mr. Zeeshan Ali

Software Manager

Mr. Muhammad Farooq

Software Manager

Mr. Athar Shafique

Network Manager (Narowal)

Directorate of Information Technology at University of Veterinary & Animal Sciences (UVAS), Lahore, dedicated to provide comprehensive IT services to support the university's technological needs. As the backbone of the university's IT infrastructure, the Directorate is committed to provide wide range of IT services in a seamless and efficient manner which includes maintenance & troubleshooting of network, provision of updated university's information through website, software development to digitize the operations of the university and 24-hours internet facility in all campuses of UVAS.

Directorate of IT ensures that the infrastructure remains robust, up-to-date, and capable of supporting the university's growing technological demands as well as provide the support to the sister institutions including Livestock & Dairy Development Department (L&DD), Higher Education Commission (HEC), Federal & Punjab Government in their various initiatives taken time to time.



SALIENT FEATURES & SERVICES PROVIDED BY THE DIRECTORATE OF INFORMATION TECHNOLOGY

Data Center

State of the art Data Center established, which is equipped with physical and network security measures to ensure the confidentiality, integrity, and availability of information.

Video Conferencing

Video conferencing facility established & maintained to hold online national/international conferences, lectures/seminars and official meetings.

Computer System with e-gadgets 1700+ computers with e-gadgets available for study faculty and staff in all departments of campuses of UVAS.

Network Infrastructure

Interlinking of various geologically dislocated departments & campuses via Fiber Optics and Radio Links for data and VOIP Services

24 x 7 Internet facility

High-speed internet facility in all campuses & hostels through LAN & WLAN infrastructure.

IT Labs

Computer labs equipped with latest computer system, printer, scanner and other IT gadgets available for students, esearchers and faculty in morning and evening shifts.

Global Access

Cartelized data repository through web platform provides global access over scientific information/data to the university stakeholders.

Printing, Scanning & CD Writing

Along with Hardware / Software troubleshooting & repairing facilities available in Morning & Evening shifts for Students, Faculty and Staff.

Free Licence Software

For Students & Faculty through collaboration with HEC.

Training & Capacity Building
Provide training over recent IT technologies to students, faculty, staff, general public and Allied Govt. Departments on neet hasis:

Access to 40,000+

es S

Latest journals through HEC Digital library.

Global EduRoam

Nationally & Internationally integrated EduRoam roaming service through comprehensive WiFi blanket in City Campus Lahore.

University Information Management System (UIMS) In-house Information Management System developed and deployed to automate most of the operation of various university departments.

Finance Management

Customized financial ERP deployed to manage purchases inventory and financial transactions.

Online Admission System

Automation

Online-automated application to manage diploma, undergraduate and postgraduate admissions.

Course Teaching System (CTS)

Online student teacher interaction system for sharing of educational resources.

University Official Website

Provision of update information about UVAS events, academic activities and achievements worldwide.

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The University Library is situated on the first floor adjacent to conference hall that has continuously been disseminating the latest knowledge/information to its faculty members, undergraduate & postgraduate students and to the entire livestock sector for the promotion of Higher Education, Research & Extension services. The University Library has made significant achievements constructing postgraduate reading hall with a computer lab consisting for conducting e-examination and for use of university students etc. The library is presently fully engaged in providing effective services for the promotion of skilled higher education, research, extension and digital services through its following sections:-

1. Library Circulation Section / OPAC Services

UVAS Library has fully computerized book's catalogue. The circulation services are being provided online, scanning the barcode systems through world reputed software Koha which is an open source bibliographical database. Library books and general collections have been placed in the main Library Hall where good seating arrangements are available. Library collection comprises of over 34,151 Text and Reference Books

UNIVERSITY LIBRARY

Mr. Muhammad Aslam
Librarian, Lahore
Ms. Abeeda Zia
Deputy Librarian, Lahore
Ms Rehana Kousar
Asst. Librarian, Lahore
Mr. Muhammad Sajid Hussain
Assistant Librarian, Ravi Campus, Pattoki
Mr. Azhar Ishaq
Assistant Librarian, CVAS, Jhang
Dr. Hafiz Muhammad Rizwan
Officer Incharge, KBCMA, Narowal

relating to Veterinary & Medical Sciences and other disciplines along with over 4200 M.Sc., M.Phil. & Ph.D. research theses. The library collection can be browsed through http://opac.uvas.edu.pk/

2. Digital Library Section

This section facilitates in accessing online databases such as Science Direct, Springer link, Blackwell etc. There are thousands online journals in these databases which very useful for the postgraduate students. Students can search these databases within university premises. Digital Library Section provides the relevant guidance & instruction on the digital library resources.

3. Digital Repository

UVAS Library has established the digital repository of indigenous research work. All the M. Phill & PhD theses are being uploaded at an online database which can be accessible from anywhere round the clock through http://opac.uvas.edu.pk:8080/jspui/

4. The Book bank Section

This section has been organized as a special part of the library to lend expensive text books to the students on long term basis as per book bank regulations. The book bank section comprises of over 5000 volumes of text books and students can make full use of this precious collection in enhancing latest knowledge.

5. Computer Lab. & e-examination hall

This fully air conditioned section was established in 1990. Multimedia, computers, scanner, laser printer, CD-writer and CD ROM searching facilities are available to facilitate library users. This section has been recently upgraded by installing 120 latest computers for conducting e-examination. Students can also use this Lab for study and explore internet facilities to search materials and documents required for completing their assignments.

SPORTS



Prof. Dr. Rana Muhammad Ayyub Chairman, Sports Board Mr. Rana Amjad Iqbal Director Ms. Humaira Latif

Assistant Director, City Campus, Lahore **Mr. Rizwan Igbal**

Assistant Director, Ravi Campus, Pattoki

Mr. M. Roshan Sarwar

Assistant Director, Ravi Campus, Pattoki

Mr. Rana Maqsood Ahmed

Assistant Director, KBCMA Narowal

Dr. Arbab Sikandar

Officer Incharge Sports, CVAS Jhang

OFFER SPORTS CLUBS

We offer Sports Clubs for comprising of many indoor and out door games including Tennis, Athletics, Cricket, Football, Hockey, Volleyball, Badminton, Table Tennis, Basketball, Bodybuilding, Judo, Karate, Wushu, Taekwondo, Jujistu, Handball, Boxing, Squash, Weightlifting, Hiking Club, Kabaddi Club, Swimming Club, Wrestling, Rugby, Tug of war, rowing, Shooting, Archery, Swimming, Baseball, Chess and Cycling, etc.

SPORTS FACILITIES

Academic learning and sports education are the complements of each other. They resemble the two sides of the same coin. If the sports education is carried out accompany with the academic curriculum, the over-all personality of the student are increased to greater extent. They get the qualities of the leadership, sharing, team spirit and tolerance from the sports. Sports education not only teachers the students to maintain the physical stamina, but also the habit of obedience, discipline, the determination to win, will power, etc.









HOSTEL FACILITIES

Prof. Dr. Aftab Ahmed Anjum Warden, City Campus, Lahore Dr. Muhammad Afzal Warden, Ravi Campus, Pattoki Prof. Dr. Iahtasham Khan Warden, CVAS Jhang Dr. Shahid Hussain Farooqi Warden, KBCMA, Narowal

Mr. Shahid Abbas

Associate Hall Warden, City Campus, Lahore

Dr. Javeria Khan

Female Hall Superintendent, City Campus, Lahore

Mr. Qadeer Islam

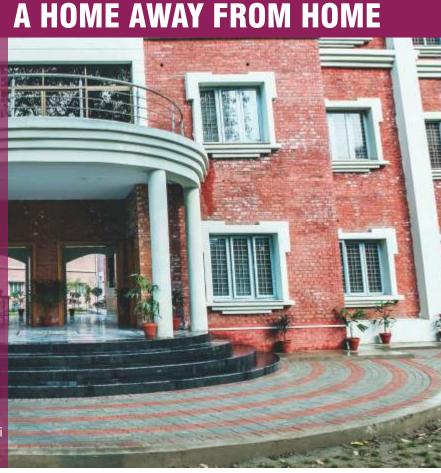
Assistant Hostel Warden, City Campus, Lahore

Mr. Saqib Manzoor

Hall Superintendent, Ravi Campus, Pattoki

Dr. Saba Sana (A-Block)

Female Hall Superintendent, Ravi Campus, Pattoki



Accommodation has always been an acute problem for the students who come from outside Lahore. Hostels are conveniently close to most amenities and services, and the location provides an ideal base to explore the rest of Lahore. In order to provide academic and research environment, it is of utmost importance that various facilities like proper accommodation, sports and data search are made available to students. There are twelve separate hostels, five for boys and six for girls. All the hostels are equipped with necessary facilities to make the stay of students comfortable. Warden office monitors all type of activities of the hostels and work 24/7 to facilitate the students. In the traditional environment of hostels, the administration and teachers give parental care to each and every student. Boarders are taught to live like an extended family in perfect harmony with all the residents of the campus. There are beautiful grassy lawns in the hostel premises which give a healthy look to the area and also provide a source of climatic peace.

Hostel Mosque: In order to facilitate Islamic Teaching and the observance of the five obligatory prayers, there is an air conditioned mosque situated at the hostel premises. In the mosque there are facilities for daily as well as for Friday prayers. A separate prayer area facility is available for girls resident students.

Mess Facility: Separate mess facility for boys and girls is available, which is run by authorized contractors under the supervision of hostels mess committee. An independent self service mess is also working in the hostels providing variety of delicious foods.

Extracurricular Activities: A Sports Complex is adjacent to the hostels where students organize different sports activity in their leisure timings, besides other games, TV, Telephone facilities are also available to facilitate students.

Internet Facilities: A 7/24 wireless network facility is being provided so that students may have internet access everywhere in the hostel area.

Shopping Center: A small shopping center consists of a general store, photo copier shop and laundry shop and other shops to cater basic necessities of resident students. Cafeteria and fruit shop are also located which comprehensively serves the fresh items and juices to the students.

Hair and Beauty Salon: Hostel also provides separate facility of hair and beauty salon for girls and Barber shop for boys residents.

Un-interrupted Power Supply: Heavy duty generators are installed to provide backup power supply for specified period of time in case of power failure.

Cold and Hot Water Supply: Electrical water coolers with water purification systems have been installed at various locations in the Hostels and solar and gas geysers also installed to provide the hot water supply in winter season.

Accommodation at Ravi Campus: With opening of new departments and degree programs the number of students increases substantially. Additionally 4 residential facilities at Ravi Campus have been developed.

Admission to Hostels: Due to limited accommodation facilities, the students are admitted only on merit. The student who wish to reside in these hostels, should obtain the application form from the warden office, Iqbal Hall or university web site and submit it to the same office for the admission. The schedule of admission to the hostels will be notified on the notice board of warden office. For any information regarding hostel admission contact us during office hours at exchange No. 042-99211449 -50 Ext. 400 and 401 and direct No. 042-99211420.

Hostel Halls

Iqbal Hall
 Jinnah Hall
 Seth Sarwar Hall
 Khadija Hall
 Tahira Hall
 Tahira Hall Extension
 Ayesha Hall

9. Fatima Hall 10. Amina Hall 11. Tipu Sultan Hall

University Magazine "VISION"

The University Magazine "Vision" is published once a year. The Vice Chancellor of the university is the Patron-in-Chief. A Publication Committee is responsible for publication of the Magazine and fortnightly News Bulletin of the university. An Editorial Committee of the students also works under the guidance of the Publication Committee.

University Mosque

For the convenience of the resident students and the staff, a mosque was built on the University Campus in 1950 where the university has employed an Imam and Moazzan who lead the prayers for the growing number of "Namazies" in the mosque. Renovation and expansion in the university mosque is going on continuous basis and right now over 1000 Namazies can offer their prayers at a time.

Medical & Health Services

University extends the medical facility to all the students. One Medical Officer & One female Senior Medical Officer, are available at the medical center. An ambulance is available all the time to shift the patient to the nearby hospital in emergency.

Medicines are available on the prescription of the medical officer. Medical & Health Committee of the university ensures the availability of the medicines & taking care of other health related issues.

Veterinary Academy

The Veterinary Academy is Purpose built designed building to organized and facilities for training/ seminars/ conference/workshop/executive meetings of all stake holders and NGO's.

A variety of eminent professor, Researchers, foreign guest speakers, scholars, bureaucrats, army officers, policy makers, anchor and corporate sector expert are invite to deliver their talks on allotted themes, Which are followed by an exhaustive interaction with in-service trainees.

The academy uses the latest methodology and modern technology to provide the highest quality of education and learning environment. The syndicate method is employed to exchange ideas and benefits from the varied experience, qualifications and opinions of inservice veterinary professional. Self-placed instruction is used for learning facts, techniques and procedures. The academy thus blends various methods of teaching techniques to optimize learning practical experience.



MEDICAL & HEALTH SERVICES

Dr. Rahila JabeenSenior Medical Officer **Dr. Khan Bahadur Nayyer**Medical Officer

VETERINARY ACADEMY

Dr. Muhammad AsifDeputy Director
Additional Charge

IMPORTANT MEET-UPS





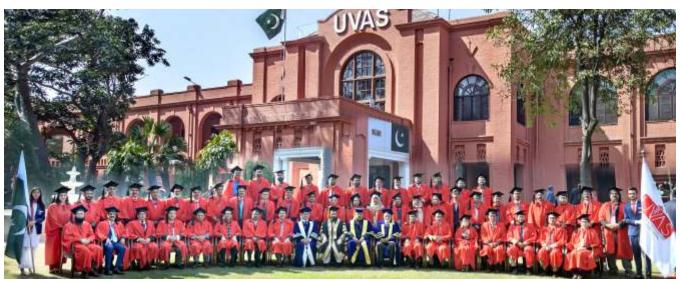






























ACKNOWLEDGMENT

I am grateful to convener admission committee Prof. Dr. Muhammad Azam for his guidance in preparing this document. Moreover all the members of the Prospectus committee are acknowledged who have helped to gather material from their respective departments. I am especially thankful to following members of this committee who put their day and night efforts in completion of this prospectus:

Dr. Muhammad Ali Hamza Assistant Professor, UVAS Business School

Mr. Basharat Ali Khan Photographer



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