

ZIAUDDIN UNIVERSITY



PROSPECTUS

OUR VISION

To be a prestigious institution of higher education recognized for its academic excellence and research, nurturing ethical and intellectual curiosity in the recipients of higher education and positively contributing towards the development of a knowledge based society in Pakistan which can fully understand global challenges in the rapidly changing political, economic and social paradigm.

OUR MISSION

Ziauddin University seeks to have a futuristic approach in imparting knowledge, skills and confidence in students and to inculcate in them such critical abilities, wisdom and values which are necessary for a forward looking coherent civil society where knowledge is disseminated and service rendered with the highest sense of moral uprightness and social responsibility to the nation, region and the world at large.

ZIAUDDIN UNIVERSITY PROSPECTUS '14

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SIR DR. ZIAUDDIN AHMAD

M.A. (Cantab.)
Ph.D. (Göttingen)
D.Sc. C.I.E. M.L.A (Central)

Ex-Vice Chancellor and Rector of Aligarh Muslim University

Sir Ziauddin Ahmed was born in 1877 in the picturesque town of Meerut in India. He was an outstanding and versatile educationist, a genius in mathematics, an expert in French, German, Italian and Arabic languages, and a political figure. He was also the longest serving Vice-Chancellor in the history of Aligarh Muslim University. His close association with Sir Syed Ahmed Khan added to his immortal stature and dignity.

He died on 23rd December 1947 in London, and was buried in the premises of the main mosque of Aligarh Muslim University, alongside Sir Syed Ahmed Khan. His untimely demise left a big void in the University and in the lives of all his well-wishers. Every year on the 23rd of December, Dr. Sir Ziauddin Ahmed Memorial Society arranges a memorial in the Abul Hassan Jafarey Auditorium of Ziauddin University, Clifton to keep his memory alive in order to inspire the younger generations to follow in his footsteps.

Sir Ziauddin Ahmed did his Bachelor of Arts in 1895 with a distinction from Mohammadan Anglo Oriental College (MAO) Aligarh. Later he did his Master of Arts in Mathematics from Calcutta and Allahabad Universities in the year 1897 and 1898 respectively.

He joined the Trinity College, Cambridge in 1901 for an Honours degree in Mathematics, and graduated with excellence by securing first position. In 1904 Sir Ziauddin was awarded the Sir Isaac Newton Scholarship, a rare honour for a foreign graduate. He was the first Indian to achieve this award.

His thirst for knowledge took him to Göttingen University, Germany. In 1905 he completed his Ph.D in Mathematics. In addition to this, Sir Ziauddin also visited Paris University in France and Bologna University in Italy in the year 1905 for advanced studies in his chosen field of Mathematics. On his return from Europe, Sir Ziauddin Ahmed devoted the rest of his life to Aligarh Muslim University which in a way finally became the limb of Pakistan Movement and as the Quaid-e-Azam once said, "An Arsenal of Pakistan".

When M.A.O. College was given the status of a University in 1920, he became its first Pro Vice Chancellor. In 1935 he was elected as the Vice Chancellor and remained so until 1946, thus becoming the longest serving Vice Chancellor in the history of Aligarh Muslim University to date. In 1946 he was appointed as Rector of the University and held the position until his demise in 1947.

Sir Ziauddin Ahmed was dedicated to Aligarh University and took keen interest in University affairs and raised funds for the University time and again. Sir Ziauddin Ahmed supported Pakistan Movement and encouraged the students of Aligarh Muslim University to play an active role in this historic movement. He was also chosen by the Quaid-e-Azam to be the General Secretary of the Muslim League Parliamentary Party in the Central Assembly of India in 1938.

Sir Ziauddin Ahmed's dream to establish a medical college at Aligarh Muslim University was not realized in his lifetime, but has come true with the establishment of Ziauddin Medical University now known as Ziauddin University in Karachi, Pakistan and Ziauddin Medical College is a constituent unit of Ziauddin University. His grandson Dr. Asim Hussain, Chancellor Ziauddin University and Chairman Dr. Ziauddin Hospital is very devotedly serving the cause of suffering humanity and medical education in Pakistan. Dr. Sir Ziauddin Ahmed could rightly be titled as "Nabbas-e-Millat" as he was the pulse reader of the Muslim nation.

While Sir Syed was the founder of Aligarh, Sir Ziauddin gave it strength and can rightly be termed as the builder of Aligarh.



A MAN OF
VISION

MESSAGE FROM THE CHANCELLOR

I welcome all students and their parents who are making a choice to join Ziauddin University.

Since its inception, Ziauddin University has been a dynamic and ever-growing institution. The University provides an enabling environment for quality teaching-learning and research through its state-of-the-art facilities and renowned competent faculty members. It offers a wealth of study opportunities across a wide range of professional disciplines. I hope your time here at Ziauddin will help to provide a foundation on which you will make your contributions to a better future for yourselves and the generations that will follow.

Ziauddin University will provide you a variety of possibilities for growing and learning during the next few years, so keep yourselves prepared for availing the opportunities Ziauddin University is offering.

DR. ASIM HUSSAIN

SIYARA.E. IMITAZ, NISHANE. IMITAZ
CHANCELLOR, ZIAUDDIN UNIVERSITY



MESSAGE FROM THE VICE CHANCELLOR

Ziauddin University is a renowned institute for higher education in Pakistan and occupies the top category (W4 Category) in the Higher Education Commission of Pakistan's profile. It has also been placed amongst the top five institutions in Medical Education in Pakistan. The Charter Inspection and Evaluation Committee of the Government of Sindh has also placed Ziauddin University among the top ranking universities of the province.

Ziauddin University prides itself in offering a 4 year BS in Speech Language Therapy and also a 1 year Residency Program in Pharmacy which are unique programs in Pakistan.

All the programs offered by Ziauddin University are accredited and recognized by the professional bodies like the Higher Education Commission of Pakistan, the Pakistan Medical and Dental Council, the Pharmacy Council of Pakistan, the Pakistan Engineering Council and the Pakistan Nursing Council. The distinction of Ziauddin University is the educational atmosphere and meaningful interaction amongst the faculty and the students creating a remarkable environment for learning. The problem-based-learning method is also a hallmark of Ziauddin University. All these qualities attract a large number of students each year who join different disciplines of the University.

I welcome all those who have interest and want to join Ziauddin University for their academic pursuits. Time would prove that this choice was the best.

PROF. DR. PIRZADA QASIM RAZA SIDDIQUI

VICE CHANCELLOR, ZIAUDDIN UNIVERSITY



GOVERNING BODY

Dr Asim Hussain S.I, H.I.
Chancellor, Ziauddin University

Prof. Dr. Pirzada Qasim Raza Siddiqui
Vice Chancellor, Ziauddin University

MEMBERS

Justice Aziz-ur-Rehman Judge Sindh High Court
Prof. Dr. Iqbal Choudhary Chairman, HEC/Rep.
Lt. Gen (Retd) Moinuddin Haider Former Governor of Sindh
Prof. Dr. Muhammad Qaiser Vice Chancellor, University of Karachi
Mr. Justice (Retd) Saeed-uz-Zaman Siddiqui Ex Chief Justice
Mr. Sharifuddin Pirzada Ex Secretary General, OIC
Sardar Yaseen Malik SI, NI Chairman, Hilton Pharma
Prof. Dr. Atta-ur-Rahman, NI, HI, SI, TI Patron-in-Chief, International Center for Chemical and Biological Sciences (ICCBS)
Nawabzada Hassan Ali Khan Chief Executive, Continental Biscuits

Mr. Shahid Aziz Siddiqi Ex Chairman, State Life Insurance
Advisor of Governor Sindh
Secretary Education, Government of Sindh or his Nominee
President KCCI Chamber of Commerce and Industries, Karachi
President PMDC or his Nominee
Prof. Kamran Hameed Dean, Faculty of Medicine
Prof. Abbas Zafar Associate Dean (Clinical), Ziauddin Medical College
Mr. Muhammad Yousaf Registrar/Secretary, Ziauddin University

ACADEMIC COUNCIL

Prof. Dr. Pirzada Qasim Raza Siddiqui
Vice Chancellor, Ziauddin University

MEMBERS

Prof. Dr. N. A. Jafarey
Advisor Academic Affairs
Prof. Dr. Anwar Ejaz Beg
Advisor to Chancellor
Prof. Dr. Kamran Hameed
Dean, Faculty of Medicine
Prof. Dr. Ejaz A. Vohra
Dean Postgraduate, Clinical
Prof. Dr. Ali Akbar Sial
Dean, Faculty of Pharmacy
Prof. Dr. Tanweer Khalid
Dean, Faculty of Social Sciences
Prof. Dr. Nuzhat Hassan
Principal, Ziauddin College of Dentistry
Prof. Dr. M. Iqbal Bhatti
Principal, Ziauddin College of Biomedical Engineering
Ms. Alia Nasir
Principal, Ziauddin College of Nursing
Ms. Sumaira Imran
Principal, Ziauddin College of Physical Therapy
Ms. Amina Siddiqui
Principal, Ziauddin College of Speech Language and Hearing Sciences
Prof. Dr. Abbas Zafar
Associate Dean Clinical
Prof. Dr. Fasia Basir
Assoc. Dean (Clinical)

Prof. Dr. Zahida Memon
Associate Dean(BHS) Clifton Campus
Dr. Arif Hussain
Assistant Dean Allied Health Sciences
Prof. Dr. Ahmed Fawad
Department of Surgery
Prof. Dr. Saeeda Baig
HOD, Department of Biochemistry
Prof. Dr. Ghaffar Billoo
Department of Pediatrics AKU
Dr. Saba Jamal
Director, Clinical Health Sciences
Dr. Sarwat Faisal
Director Allied Health Sciences
Mr. Iqbal Jamil
Director, ICMS
Dr. Arshia Samin
Director Quality Enhancement Cell
Mr. Nadeem Zafar
Controller of Examinations
Mr. Syed Attaullah Shah
Chief Librarian
Dr. Nida Hussain
Associate Dean, Faculty Affairs
Mr. Muhammad Yousaf
Registrar
Member/Secretary

ZIAUDDIN UNIVERSITY

Dr. Sir Ziauddin's vision was transformed into reality, in the late 1950's, when his daughter Dr. Ejaz Fatima, and his son-in-law Dr. Tajammul Hussain, started a small maternity home in Nazimabad. Over the years, this small maternity home took shape of a busy 80 bed hospital that serves the densely populated area of Nazimabad.

In 1968, the family of Dr. Ziauddin established Dr. Ziauddin Hospital Trust, where in the same year this trust established a second hospital in North Nazimabad as 'Dr. Ziauddin Hospital', which is now a 300 bed tertiary care hospital, catering to a large population. This hospital provides an opportunity for students to gain knowledge and skills in assessing and evaluating a wide range of problems in a tertiary care setting. The hospital is equipped with state-of-the-art equipment necessary to diagnose and manage problems effectively and efficiently.

In August 1994, through an Ordinance (XVII of 1994), the Government of Sindh granted the permission to establish Dr. Ziauddin Post Graduate Institute of Medical Sciences. By virtue of this Ordinance, the Institute could grant its own Post Graduate degrees and diplomas.

In October 1995, the Sindh Assembly passed an Act (VI of 1995) for the establishment of Ziauddin Medical University. At this time the university also established an association with the neighboring community to set up a health center, and entered into mutual partnership with the Karachi Municipal catchments population by providing healthcare services, educational support.

In December 2005, Ziauddin Medical University was given the Charter as Ziauddin University vide "The Ziauddin University" (Amendment) ACT 2003 dated 13th December, 2005.

Presently, following colleges are successfully running under the umbrella of Ziauddin University:

- Ziauddin Medical College
- Ziauddin College of Pharmacy
- Ziauddin College of Dentistry
- Ziauddin College of Bio-Medical Engineering
- Ziauddin College of Nursing
- Ziauddin College of Speech, Language & Hearing Sciences
- Ziauddin College of Allied Health Sciences
- Ziauddin College of Physical Therapy
- Institute of Communication & Media Studies

Future Plans of Ziauddin University are:

- Faculty of Arts (Visual & Performing Arts)
- Faculty of Law
- Faculty of Engineering
- Faculty Environmental Sciences



RESEARCH AND ADVOCACY

The University aims at excellence in basic, clinical and population-based research. It offers ample opportunities to departments, graduates and undergraduate students interested in undertaking research.

The University research priorities commensurate primarily with the health care priorities of the country. Research projects are supported and encouraged in clinical sciences, basic medical sciences, and health systems. The University collaborates with other national institutions for research activities being conducted by postgraduate students and the faculty. It also extends financial support to undergraduate students and faculty for the purpose of research.

Undergraduate students from the very first year are encouraged for electives within the university or in other institutions to gain hands-on experience in laboratory techniques or community based surveys.

RESEARCH GRANT

The Faculty is encouraged to fetch grants from International and National agencies. Moreover, M.Phil and Ph.D students are granted 0.1 million seed money each from the University for their research work.

RESEARCH PUBLICATIONS

Research output in the form of publications is an essential component of the University functions. The faculty and students are encouraged to publish their research work and university provides support and incentives for scholarly activities. Authors are also awarded for their publications.

WORKSHOPS

Regular training workshops are arranged for the faculty, postgraduate and undergraduate students for capacity building in research and scholarly activity.

QUALITY ENHANCEMENT CELL

Ziauddin University has always played a leadership role in accepting and adapting best practices in the field of Education. Quality Enhancement Cell (QEC) of Ziauddin University has the commitment to ensure that educational provision of all the constituent institutions of the university are operating with appropriate academic standards as provided by the respective accrediting bodies and are taking deliberate steps to bring about continual improvement in learning experiences of the students.

QEC has developed a culture which recognizes the importance of quality and quality assurance in approval, monitoring and periodic review of academic programs.

assessment of students, quality assurance of teaching staff, learning resources, student support and information to the stakeholders. Review of academic programs is carried out by adopting consistency of procedures for self assessment system. Student course evaluation, student teacher evaluation, graduating student survey, alumni survey and employer's survey are the important tools which are used for this purpose. An explicit follow-up procedure is in place to review the actions taken by each program.

In the latest quantitative assessment carried out by the Quality Assurance Agency of HEC in 2013, QEC of Ziauddin University obtained a score of 85% and was ranked in "W" category.

PROFESSIONAL ACCREDITATIONS

Ziauddin University is accredited from the following bodies:

Ziauddin Medical College
Ziauddin College of Dentistry
Ziauddin College of Pharmacy
Ziauddin College of Nursing
Ziauddin College of Biomedical Engineering

Pakistan Medical and Dental Council (PM&DC)
Pakistan Medical and Dental Council (PM&DC)
Pakistan Council of Pharmacy (PCP)
Pakistan Nursing Council (PNC)
Pakistan Engineering Council (PEC)

CLINICAL SKILLS AND HEALTH INFORMATICS LAB

The Clinical Skills Laboratory is now becoming an integral part of medical curriculum in most modern medical and post graduate schools. We established Clinical Skills and Health informatics in year 2010 equipped with state of art simulators, manikins and models.

The Clinical Skills Laboratory is designed for teaching and assessing learners at all level of medical curriculum. It conducts workshops, seminars, classes for integrated curriculum and clinical skills rotation in 3rd M.B.B.S

program and now BLS and number of other activities have been started in BDS Program also.

The lab provides learners with the ideal setting to practice the procedural skills, history taking and physical examination skills, communication skills, and interpersonal skills. The simulated patient encounters experience of medical students provides transition from the classroom teaching to real patient contact in safe environments.

UNIVERSITY LIBRARIES

The Ziauddin University Learning Resource Centre network has following nine libraries for different faculties and colleges at different campuses. The prime goal of these libraries is to provide quality health care information to support and strengthen the university and hospital's academic, research and patient care programs:

A) LEARNING RESOURCE CENTRE -1 (ZMU), CLIFTON CAMPUS

B) LEARNING RESOURCE CENTRE -2 (ZMU), NORTH NAZIMABAD CAMPUS

C) LEARNING RESOURCE CENTRE -3 (ZMU), KEMARI CAMPUS

D) LEARNING RESOURCE CENTRE (ZCN), NORTH NAZIMABAD

E) LEARNING RESOURCE CENTRE (ZCP), CLIFTON

F) LEARNING RESOURCE CENTRE (ZCSLT), CLIFTON

G) LEARNING RESOURCE CENTRE (ZCPT), NORTH NAZIMABAD

H) LEARNING RESOURCE CENTRE (ZCD), CLIFTON

I) LEARNING RESOURCE CENTRE (ZBME), NORTH NAZIMABAD

LIBRARY COLLECTION

The following databases consist of 882 online full text journals and thousands of books on Bio-Medical and related subjects. It is worth mentioning that HEC also provides thousands of e-journals and e-books on other important subjects to support the University curriculum and programs. These include:

- Springerlink
- Wiley-Blackwell
- HighWire
- Ebrary

More than 15,000 books (hardcopies), 50 journals, 800 CD/DVD, hundreds of Audio/Video Cassettes, precious and valuable archives, newspapers and magazines are also available in these libraries.

NETWORKING

Through a networking system all nine libraries of Ziauddin University can search any literature simultaneously from the central database.

LIBRARY TIMINGS

Monday to Friday, 8:30 am to 8:30 pm
Saturday, 8:30 am to 4:30 pm

STAFF

Chief Librarian
Syed Attaullah Shah, MA, MLIS, DPA

Deputy Librarian, Clifton Campus
Syeda Kishwar Zaheer, MLIS
Zahida Anjum, MLIS, MA

TEACHING COLLECTIONS

A range of specimens about Anatomy and Pathology form a large collection for acquiring a basic understanding of disease. Facilities include teaching videos, audio visual material, poster displays, computer-based tutorials, self-assessment programs and interactive CD-ROM based computer programs. Students are encouraged to use the collection throughout their training on individual basis and small group teaching is provided at various stages of their education.



EXTRA-CURRICULAR ACTIVITIES

The university attaches great importance to extra-curricular activities and students are encouraged to participate. Students have represented the university in Inter-collegiate and Inter-university debate competitions and cricket tournaments. Inter-class table tennis competitions are also held regularly.

- Inter-university and intra-university debates (English and Urdu)

DRAMA

- Intra-university activities

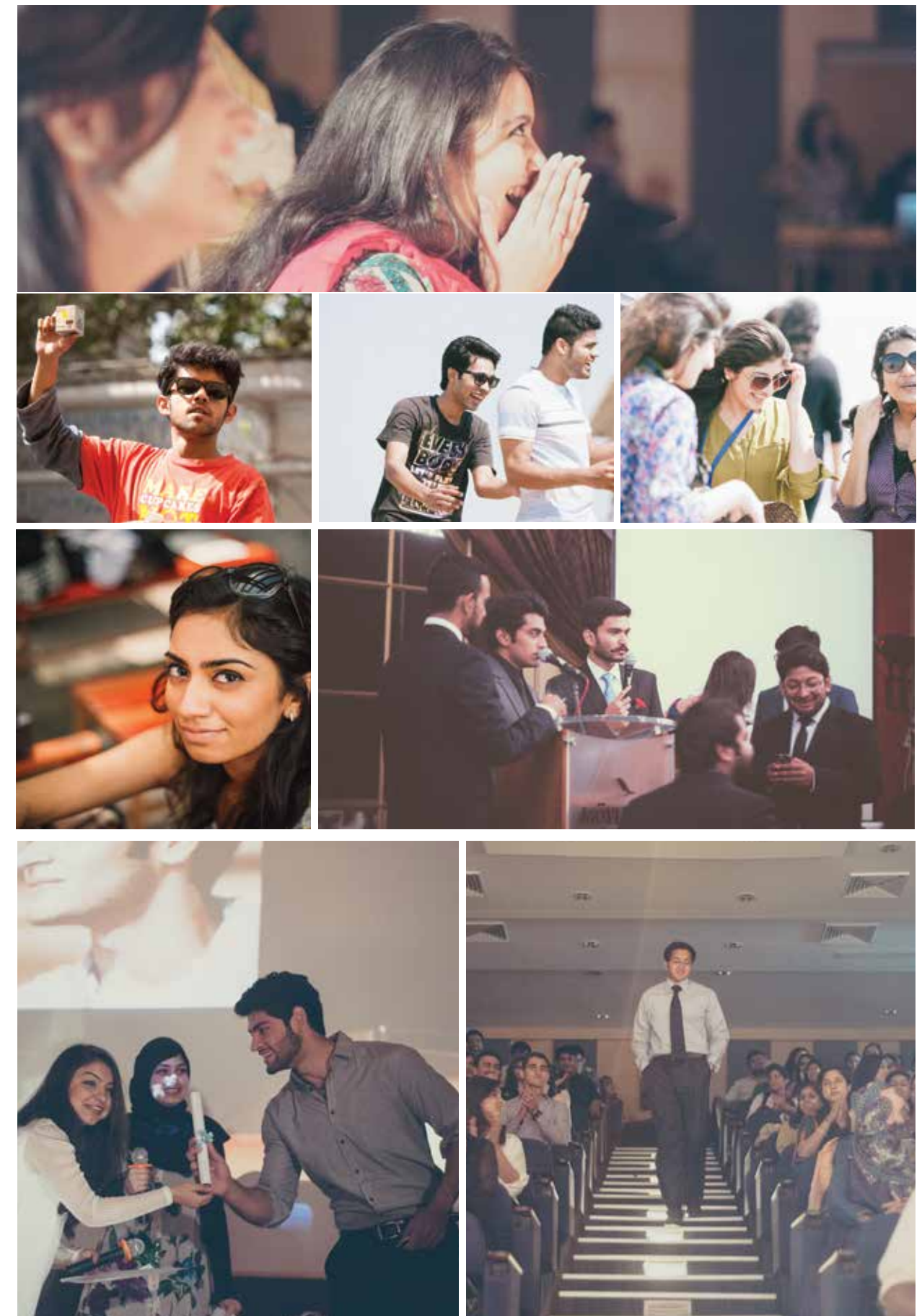
OTHER ACTIVITIES

- Participation in TV quiz programs
- Annual picnic
- Educational tours, etc.

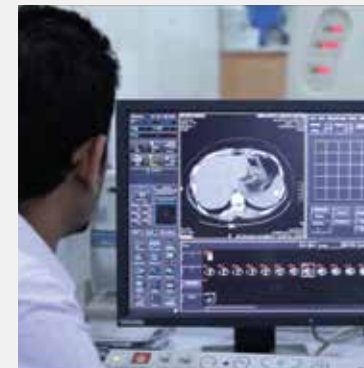
SPORTS

- Intra and inter-university activities are conducted in a variety of sports through out the year.

DEBATES



ZIAUDDIN UNIVERSITY



FACULTY OF MEDICINE



FACULTY OF MEDICINE

Ziauddin Medical College was a pleasant surprise. Faculty was warm and welcoming, and very hospitable, the schedule was not easy, there were many classes to take and plenty of material to be learned. What you got out of the experience depended upon how much you put into it. My advice to incoming students is, to place your education first.

SAHAR FATIMA RIZVI, MBBS
CLASS OF 2013
ZIAUDDIN FACULTY OF MEDICINE
ZIAUDDIN UNIVERSITY



M Phil post graduate program at Ziauddin University was well structured, purposeful, challenging and stimulating. It helped me grow in various disciplines related both to academics and research. I firmly Believe that my choice of Ziauddin University for my post-graduation was the right one as it has prepared me to face the daily challenges today as full time faculty in the university.

DR ARSALAN MANZOOR MUGHAL, M Phil
ASSISTANT PROFESSOR ANATOMY
ZIAUDDIN FACULTY OF MEDICINE
ZIAUDDIN UNIVERSITY

INTRODUCTION

Ziauddin Faculty of Medicine was established in 1996. It is strategically located within the university campus at Clifton, Karachi, Medical teaching programs are spread over three main tertiary care hospitals in different parts of the city. These hospitals are well equipped with advanced diagnostic, monitoring and treatment facilities. Ziauddin Group of hospitals includes:

- Dr. Ziauddin Hospital, North Nazimabad campus: is a 300 bedded hospital
- Dr.Ziauddin Hospital, Clifton campus: is a 150 bedded hospital
- Dr.Ziauddin Hospital, Kemari campus: is a 125 bedded hospital

Other clinical learning sites include:

- Sobhraj Maternity Home
- Primary Health Care Centers, Sikanderabad.
- Dr. Ziauddin Cancer Hospital, North Nazimabad.
- Dr. Ziauddin Maternal and Child Health Centre, Gol Market Nazimabad.

Ziauddin Faculty of Medicine prepares its students to become skilled practitioners, researchers and teachers with leadership potential.

They develop skills to deal with health problems holistically and solve them at individual, family and community levels, through an innovative program, with emphasis on individual attention in small teaching/learning groups. The undergraduate clinical programs are community-oriented and address priority healthcare needs of the country. This enables students to acquire the art and skill of probing scientifically into

health and related problems of individuals and communities. Students are exposed to a variety of learning strategies to provide experiential learning through a multi-disciplinary approach to patient care. The Postgraduate program in Basic Health Sciences is highly developed and has a structured curriculum which focuses on the growing need for research oriented medical teachers trained in modern teaching and learning strategies.

To meet the challenges posed by the exponential growth of information, students assume responsibility of their own learning, using student centered learning strategies such as Problem-Based Learning (PBL) and Case Based Discussions, which also promote self-learning skills and team work... Research projects, relevant to national and community needs, are also encouraged.

PROGRAMS OFFERED

Ziauddin Faculty of Medicine offers following undergraduate and postgraduate programs which are recognized by the Pakistan Medical and Dental Council (PMDC) that is the regulatory body responsible for issuing license to practice medicine and the Higher Education Commission (HEC):

MBBS
M.PHIL IN BASIC HEALTH SCIENCES
PH.D IN BASIC HEALTH SCIENCES
MD IN CLINICAL SCIENCES
MS IN CLINICAL SCIENCES
CLINICAL DIPLOMAS



MBBS

At Ziauddin Medical College a student is identified as an adult learner and is expected to utilize inborn capabilities to adapt and understand the rapidly changing academic atmosphere around the world.

Academic schedule for the MBBS degree program, reflects the innovative system-based course. In the first three years of training a semester program has been introduced, and each year comprises of 2 semesters. For the clinical training and experience the students are rotated through all three hospitals affiliated with the University .

Ziauddin Medical College has taken the initiative of improving quality of medical education by fostering adult learning styles, catering to the requirements of the students and early introduction of clinical experience. In order to facilitate student learning, the basic medical sciences curriculum utilizes multiple instructional and assessment strategies.

The course content is presented with a Body System based Modular approach which is in line with regulations of the Pakistan Medical and Dental Council for MBBS degree. Emphasis is given to the development of conceptual understanding and the ability to construct knowledge for oneself. The students are actively involved in their learning process and assessment involves examining the learner's entire conceptual network, not just focusing on discreet facts and principles.

Faculty from Basic Health Sciences (BHS), Community Health Sciences (CHS) and Clinical Sciences are collaboratively engaged in teaching programs. . As a result, students develop a comprehensive understanding and holistic approach to recognize and solve healthcare problems.

The primary health care program run by the university (PHC) serve as educational sites for community-based training. The PHC program is a unique prototype of partnership between academia, local NGOs,

government and international NGOs for education, research and service.

LEARNING AND TEACHING STRATEGIES

SELF-DIRECTED LEARNING

The college policy is to prepare students to become independent, self-directed, life-long learners. The introduction of student-centered learning strategy is a step towards promotion of critical thinking and problem solving skills. Students are encouraged to consult from a wide selection of learning resources including books, journals, models, computer assisted learning programs, and the Internet. In the very introductory course students learn how to use library and computer facilities effectively.

PROBLEM-BASED LEARNING (PBL)

PBL is the leading strategy adopted for learning at the Ziauddin Medical College. This approach is characterized by:

- Providing students an opportunity to learn how to deal with the problems they face in later professional practice.
- Emphasis on self-motivation and responsibility for learning.
- Training for learning professional skills such as leadership and team work.

The aim of problem-based learning is to overcome various drawbacks in the traditional methods of instruction for instance; passive role of students during lectures, irrelevant subject matter in curriculum, lack of integration between disciplines, insufficient preparation of students for higher education after completing MBBS and in particular, the difficulties experienced by many medical graduates in applying what they have learned. Through problem-based learning, students are encouraged to seek information and progressively direct their own learning. These skills provide students the basis for a lifetime of medical practice.

CLINICAL TRAINING

A balance between hospital, ambulatory care, and community settings is essential for a meaningful exposure to curative, preventive, and rehabilitative aspects of health care. Learning at The Ziauddin group of hospitals provides a unique experience of exposure to patients from different geographical and economic backgrounds.

enables such a useful experience. a balanced training Sikanderabad, a squatter settlement adjacent to the university provides a community-based setting and the out-patient care for patients belonging to a lower socio-economic class. The Family Medicine Health Centre (FMHC) is a low-cost outpatient clinic aimed for less affording population living close to the Clifton campus. These sites provide better opportunities for learning for students as they come in contact with a varying range of people and patients with problems.

Students begin their clinical experience from the 3rd year. After an introductory course students gain experience in emergency, PHC clinics as well as out-patient and in-patient.

The fourth year is mainly spent at Kemari campus with fully developed ENT, Ophthalmology departments and clinical disciplines of Medicine and Allied, Surgery and Allied, Paediatrics and Gynaecology and Obstetrics.

In the Final fifth year, students are based in North Nazimabad campus where a comprehensive attachment in Medicine, Surgery, Paediatrics and Gynaecology and Obstetrics aims at a professional problem oriented approach to make them ready for taking care of patients when they graduate. They are encouraged to make their own presentations and participate in discussions as well as gain from dedicated lectures and group tutorials on selected topics. The hospital's state of the art diagnostics and intensive care facility helps polish their clinical learning.

ELECTIVES

For MBBS students, elective experience is mandatory and is to be acquired in institutions which may not be a part of the Ziauddin University system. Students have an option to undergo this in Pakistan or overseas. This experience allows them a wider exposure and enables them to discover their specialized field of interest. The financial responsibility of completing electives is undertaken by the students. The Dean's Office facilitates placement of students for this purpose.

STUDENT ASSESSMENT

GENERAL PRINCIPLES

It is recognized that the form and content of assessment have a strong influence on shaping students' learning style and approach. The structure, content, and process of all assessments are designed to reflect and reinforce specified learning objectives at each stage of the program. Assessments serve the purpose of giving feedback to the students and the faculty (formative), as well as certification (summative).

MODES OF ASSESSMENT

Multiple Choice Questions (MCQ) examinations are used primarily to assess retained basic factual information. Short answer papers help to assess the breadth of core factual knowledge. Essay, or modified essay papers assess in-depth knowledge, and understanding. Objective Structured Practical/Clinical Examinations (OSPE/ OSCE) are used to assess practical skills and competencies in basic clinical procedures. The oral examination is to assess knowledge mainly of a higher domain. It is also used as a moderating instrument in case of doubt.

CONTINUOUS ASSESSMENT POLICY

Securing a minimum pass level in an academic year requires consistency in Continuous Assessments. The minimum pass level is determined by a student's achievement in module examinations, which include written tests, practical assignments and other academic activities. Student eligibility for Summative Examinations is determined by an individual's attendance and performance in test and examination in a semester or academic year. Each student requires at least 80% attendance. Student performance in each year is judged by formative (continuous) and summative (end of year) assessments.

PROFESSIONAL EXAMINATIONS

The first three academic years are semester based which are in line with the PMDC/HEC. The following two years are currently based on annual examination system. A consistent record of satisfactory performance is necessary for eligibility to MBBS Final Assessment.. Each student's performance is reviewed by the concerned department, which also determines eligibility for the certifying examination. Progression to second, third, fourth and fifth year is regularly determined by achieving satisfactory performance in the respective academic year.



MBBS ADMISSION POLICY

Admission to Ziauddin Medical College for a five year MBBS degree course is open to all individuals who meet the selection criteria. All candidates are chosen for their academic achievements and potential. Students are admitted to the first year of MBBS on previous high school and/or college academic record, and score in test and interview conducted by the Ziauddin University. Selection of students is on the basis of an admission policy approved by the Governing Body of Ziauddin University, which is in line with the regulations of Pakistan Medical and Dental Council. Students are largely admitted in the category of Local Residents. Only a few seats are available for Overseas Students. The university does NOT admit students on the basis of donations.

I. GENERAL CRITERIA FOR ADMISSION

The general criteria for students seeking admission to MBBS degree program are as follows:

Minimum 60% marks in Pre-Medical group of Higher Secondary Certificate Examination held by a recognized Board of Intermediate Education in Pakistan. Students (Local and Overseas) are required to take a written test (MCQs) and appear for an interview. Proficiency in English language, both in written and verbal expression is required.

With GCE Cambridge/London, 'Advanced level' (A level), American High School Diploma, and other equivalent Certificates or Diplomas, an equivalence to HSC (Pre-Medical) will be decided as per guidelines of HEC. Students with American High School Certificate are also recommended to submit SAT-II with a minimum recommended score of 550 in subjects of Biology, Chemistry and one more Science subject.

II. LOCAL STUDENTS

Documents to be submitted for admission:

- Duly filled in admission form of Ziauddin Medical College.
- Photographs (5 passport size).
- One copy each of mark sheets of Secondary School Certificate (SSC Part I and II).
- One copy of Secondary School Certificate (if available).
- One copy each of mark sheets of Higher Secondary Certificate (HSC Part I and II Pre-Medical). If results of HSC Part II have not been declared by the concerned board, admit card of HSC Part II examination must be submitted.
- For students with GCE Cambridge/London, one copy each of the transcript of 'O' level and 'A' level examination results.
- IBCC equivalence certificate for O & A Levels/any other international qualification results.
- One copy of National Identity Card (In case NIC is not available, 'B' form with a copy of Parent's / Guardian's NIC must be submitted).

Student Selection

Final selection of local students is decided on the basis of their performance in the following:

- Secondary School Certificate
- Higher Secondary Certificate
- Ziauddin University Test
- Interview

III. ADMISSION CRITERIA FOR OVERSEAS STUDENTS

The university has defined the category of Overseas Students as follows:

- Wards of Pakistanis residing abroad.
- Students sponsored by their relatives or friends residing abroad.
- Students who have completed High School from abroad.

Change to Local Resident status will not be allowed to those admitted as Overseas Students.

IV. FOR HIGH SCHOOL GRADUATES OF USA/CANADA

- One copy of High School Certificate (Grade 9-12 or 13) attested by the School Principal/ Officer.
- Recommended SAT-II with minimum score of 550 in subjects of Biology, Chemistry and one more.

Note: Before submitting applications, applicants must ensure that they have complied with the instructions given with the application form. It remains the responsibility of the applicant to submit application according to the instructions. Students are expected to submit photocopies of documents along with the application and originals for the purpose of verification by the university. If required university will check the authenticity of the documents submitted with the concerned school, college, board or university.

V. FOR STUDENTS WHO HAVE GRADUATED FROM OVERSEAS PAKISTANI SCHOOLS:

Documents to be submitted for admission:

- Duly filled in application form of Ziauddin University along with the required non-refundable fee in US dollars
- One copy each of mark sheets of Secondary School Certificate (SSC Part I and II)
- One copy each of mark sheets of Higher Secondary Certificate (HSC Part I and II Pre-Medical) (In case the result of HSC Part II has not been declared by the concerned Board, photocopy of admit card of HSC Part II examination must be submitted).
- For students completing GCE, Cambridge London, one copy each of 'O' and 'A' Levels transcripts.

VI. APTITUDE TEST

The university conducts an Aptitude Test for all eligible local and overseas candidates. The test consists of Multiple Choice Questions of various types. The test comprises of four to five sections designed to assess each applicant's performance in the areas of:

- Biology
- Chemistry
- Physics
- General Knowledge
- Aptitude
- English

The level of questions in sections of Biology, Physics and Chemistry correspond to that expected at the end of Intermediate Examination or equivalent qualifications e.g. 12th Year.

VII. INTERVIEW

Short listed applicants will be interviewed to assess their suitability to complete MBBS course and pursue a career in health sciences.

VIII. NOTIFICATION OF ADMISSION

The Registrar of the university will notify students who are successful in the admission process. Successful applicants are given a deadline by which to accept the offer of admission. Offers not accepted by the given deadline are cancelled.

IX. REQUIREMENTS FOR SELECTED STUDENTS

Successful students selected for MBBS program are expected to fulfill the following:

- Verification of Educational Testimonials: Original transcripts, mark sheets, certificates to be brought for attestation by the university.
- Medical Examination: The undergraduate medical program is both physically and mentally demanding. Students offered admission are required to undergo a comprehensive medical examination including laboratory investigations and chest X-ray, before they are allowed to join classes.
- Immunization: Clinical experience carries a small personal risk of infection. In their own interest, and also in the interest of patients and others, students must provide evidence of immunization against the following: Tuberculosis (BCG), Diphtheria, Poliomyelitis, Pertussis Hepatitis B, Tetanus, Measles/Mumps and Rubella (for females)

FEE STRUCTURE FOR MBBS PROGRAM**Local Residents**

Prospectus & Application Form:	Rs. 2000/-
Application Processing Fee:	Rs. 2000/-
Admission Fee:	Rs.200,000/-
(Non-Refundable)	

Tuition Fee (Current Structure)

Year 1	Rs. 600,000/- per annum
Year 2	Rs. 600,000/- per annum
Year 3	Rs. 600,000/- per annum
Year 4	Rs. 600,000/- per annum
Year 5	Rs. 600,000/- per annum

Overseas Applicants

Prospectus and Application Form:	US \$ 100
Admission Fee :	US \$ 3000
Tuition Fee (Current Structure)	
MBBS 1st and 2nd year	US \$ 10000
	per annum
MBBS 3rd, 4th and final year	US \$ 12000
	per annum

Other Charges for both local and overseas students

Security Deposit:	Rs. 2000
Medical Examination Fee:	Rs. 5000
Graduation Fees:	Rs. 7000

Payment of Fees: On receiving offer of admission from the Registrar of the University, students are expected to deposit the required (non-refundable) admission and tuition fees within the due date mentioned in the offer letter. If the required fee is not submitted within the specified date the admission will stand cancelled.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian.

The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.

Examination Fee will be charged separately.



POSTGRADUATE PROGRAM IN BASIC HEALTH SCIENCES (M.PHIL - PH.D)

The Postgraduate Program in Basic Health Sciences was started at ZU in 1997. This integrated program is divided into semesters and provides extensive experience and training to the candidates who acquire knowledge, skills and attitude required for teaching and research. The curriculum is covered through problem based learning, lectures, seminars and journal club. Systems are placed for evaluation and performance concerning the candidate's performance and proper guidance for appropriate growth in all areas of training and professional experience.

MASTER OF PHILOSOPHY (M.PHIL)

M.Phil candidates in Basic Health Sciences will have to be full time research students for a minimum period of three academic years. The award of degree shall be based on both, course work and thesis. The course work is covered in six semesters with the last two semesters for research and advanced techniques.

The program is recognized by Pakistan Medical and Dental Council (PMDC) and Higher Education Commission (HEC) and follows regulations for registration to research studies leading to the degree of M.Phil in the following subjects of Medical and Health Sciences: (i) Anatomy -(ii) Biochemistry -(iii) Physiology -(iv) Pharmacology -(v) Pathology

ELIGIBILITY CRITERIA

- Candidates possessing MBBS/BDS degree from an HEC recognized university.
- M.Phil entry test/NTS GAT

- Interviews of candidates short listed on the basis of performance in the M.Phil entry test.

Final selection of candidates will be based on the previous academic record and experience, entry test and an interview.

DOCTOR OF PHILOSOPHY (PH.D)

Ph.D students in various faculties of Health and Medical Sciences will have to be full time research students for a minimum period of four academic years. The award of degree shall be both by course work and thesis. The program is recognized by PMDC and HEC and follow regulations for registration to research studies leading to the degree of doctorate in the following subjects of Medical and Health Sciences:

- Anatomy -(ii) Biochemistry -(iii) Physiology -(iv) Pharmacology -(v) Pathology -(vi) Microbiology

ELIGIBILITY CRITERIA

- Possessing M.Phil from HEC recognized university and PMD/PMDC/Ziauddin University.
- Student has to submit a synopsis to Board of Advanced Studies and Research (BASR) followed by an interview.
- The student has to pass HEC's GRE (subject) with a raw score of 50 during the study program.

FEE STRUCTURE (M.Phil / Ph.D)

Admission fee Rs. 25,000/-
Tuition fee Rs. 50,000/- per semester.
Examination fee Rs. 50,000/-



DOCTOR OF MEDICINE (MD) & MASTER OF SURGERY (MS)

Ziauddin University offers MD/MS program of 4-5 years duration in many clinical disciplines. The program is approved by PMDC for successful academic career and clinical practices. The course is designed to produce skilled practitioners, researchers, teachers with exceptional proficiency in the chosen clinical field. The course comprises of core subjects and also focuses on clinical research practices.

The programs are supervised by qualified faculty and have support of allied disciplines. The University hospitals are modern and fully equipped with diagnostic services, inpatient facilities including Intensive and Coronary Care Units and also fully equipped Radiology department with interventional procedures facility. The library is well provided with latest journals and also has multimedia facilities including Internet.

For medical graduates interested in pursuing a research degree, the University offers following programs:

DOCTOR OF MEDICINE (MD)

- Cardiology • Critical Care • Dermatology
- Emergency • Medicine Microbiology

- Gastroenterology • Nephrology • Neurology
- Nuclear Medicine • Medicine • Paediatrics
- Psychiatry • Radiology • Radiotherapy (Radiation Oncology)
- Gynaecology and Obstetrics • Ophthalmology
- Urology

MASTER OF SURGERY (MS)

- ENT -General Surgery • Orthopaedic Surgery
- Gynaecology and Obstetrics • Ophthalmology
- Urology

ELIGIBILITY CRITERIA

- Candidates possessing MBBS or equivalent qualification recognized by PMDC and have done one year of House Job in an institute recognized by PMDC.
- Eligible candidates will be required to pass an entrance test and will be interviewed for suitability by the Postgraduate Committee.

FEES AND STIPEND

- Admission fees Rs. 25,000/- (non-refundable)
- Examination fees Rs. 50,000/-
- In service candidates will be given a stipend.



DIPLOMA PROGRAMS

The University offers Postgraduate Clinical Diplomas in the following disciplines:

- Anesthesia
- Clinical Pathology
- Cardiology
- Dermatology
- Family Medicine
- Medical Oncology
- Paediatric Medicine
- Psychiatry
- Gynaecology and Obstetrics

POST GRADUATE TRAINING

Ziauddin University is recognized for postgraduate training by the College of Physicians and Surgeons Pakistan for the following programs:

MCPS

- Chemical Pathology
- Ophthalmology

- Paediatrics

FCPS

- Anesthesia
- Chemical Pathology
- ENT
- Family Medicine
- Gastroenterology
- Haematology
- Histopathology
- Medicine

- Microbiology
- Neurology
- Ophthalmology
- Gynaecology and Obstetrics
- Radiology
- Paediatrics
- Surgery
- Nephrology



FACULTY

DEANS

Prof. Dr. Kamran Hameed
Dean, Faculty of Medicine

Prof. Dr. Ejaz Ahmed Vohra
Dean, Postgraduate Studies (Clinical)

Prof. Dr. Abbas Zafar
Associate Dean, Clinical (North)

Prof. Dr. Zahida Memon
Associate Dean, Basic Health Sciences (BHS)

Prof. Dr. Fasia Basir
Associate Dean, Clinical (Clifton)

Dr. Bushra Shirazi
Associate Dean, Clinical (KDLB)

Dr. Nida Hussain,
Associate Dean, Faculty/Students Affairs

BASIC HEALTH SCIENCES

ANATOMY

Professor & Chairperson
Dr. Nuzhat Hassan, MBBS, M.Phil

Professor
Dr. Ishrat S. Shokh, MBBS, M.Phil

Associate Professor
Dr. Bushra Waseem, MBBS, FCPS

Assistant Professors
Dr. Kevin Borges, MBBS, M.Phil
Dr. Arsalan Manzoor, MBBS, M.Phil

BIOCHEMISTRY

Professor & Chairperson
Dr. Saeeda Baig, M.Sc, M.Phil, Ph.D

Professor
Dr. Zil-A-Rubab, MBBS, M.Phil

Assistant Professors
Dr. Shamim Mushthaq, M.Sc. Ph.D

COMMUNITY HEALTH SCIENCES

Professor & Chairperson
Dr. Shahida Rasheed, MBBS, MPH, MCPS, FCPS

Assistant Professors
Dr. Farah Saleem, MBBS, DCPS
Dr. Syeda Nosheen Zehra, MBBS, DCPS
Dr. Hasan Danish, MBBS, MPH

Senior Lecturers
Dr. Geeti Ara, MBBS
Dr. Hafsa Yaseen, MBBS

FORENSIC MEDICINE AND TOXICOLOGY

Professor & Chairperson
Dr. Qudsia Hassan, MBBS, DMJ

Lecturers
Dr. Alishan Iqbal, MBBS
Dr. Insiya Ali, MBBS

PATHOLOGY AND MICROBIOLOGY

Professor & Chairperson
Dr. Sirajuddaula Syed, MBBS, MRC (Path), FRC (Path)

Professors

Dr. Qamar Jamal, MBBS, M.Phil, Ph.D
Dr. Bader Jehan Farooqi, MBBS, FCPS, Ph.D, M.Sc, D.Path
Dr. Naila Hadi, MBBS, M.Phil

Associate Professor

Dr. Arif Hussain, MBBS, DCP, M.Sc.
Dr. Adnan Mustafa Zubairi, MBBS, FCPS (Clinical Pathology)

Assistant Professors

Dr. Fouzia Shaikh, MBBS, M.Phil
Dr. Saba Jamal, MBBS, Diplomat American Board of Pathology & Hematology
Dr. Fouzia Lateef MBBS, MCPS, FCPS
Dr. Muhammad Adnan Qureshi, MBBS, FCPS (Hematology)
Dr. Azra Rizwan, MBBS, FCPS
Dr. Faisal Iqbal Afridi MBBS, FCPS (Microbiology)
Dr. Najia Tabbassum Mahfooz, MBBS, M.Phil
Dr. Faraz Ahmed Baig, MBBS, M.Phil

PHARMACOLOGY THERAPEUTICS

Professor & Chairperson
Dr. Zahida Memon, MBBS, M.Phil, Ph.D

Professor

Dr. Samia Perwaiz, MBBS, M.Phil, Ph.D
Dr. M. Owais Ismail, MBBS, M.Phil

Assistant Professor

Dr. Shehla Shaheen, MBBS, M. Phil

PHYSIOLOGY

Professor & Chairperson
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Assistant Professors

Dr. Sadaf Fatima Naqvi, MBBS, M.Phil
Dr. Soofia Amjad, MBBS, M.Phil
Dr. Shazia Nadeem, BDS, M.Phil

FACULTY OF CLINICAL SCIENCES

ANAESTHESIOLOGY

Professor & Chairperson
Dr. Younus Khatri, MBBS, FCPS

Senior Registrars

Dr. M. Yahya Khan, MBBS MCPS
Dr. S. M. Shaq, MBBS, MCPS
Dr. Zeeshan Mirza, MBBS, MCPS

MEDICINE AND ALLIED

GENERAL MEDICINE

Professor & Chairperson
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Professors

Dr. Kamran Hameed, MBBS, FCPS, FRCP, FACP
Dr. Mahmud Zulqurnain Jilani, MBBS, MRCP, FRCP
Dr. Sohail Akhtar, MBBS, MRCP, FRCP
Dr. Fasia Basir, MBBS, FCPS
Dr. Muhammad Umar Jahangir, MBBS, FCPS

Associate Professor

Dr. Faisal Ziauddin, MBBS, FCPS

Assistant Professors

Dr. Uzma Ghori, MBBS, FCPS
Dr. Imtiaz Khalid, MBBS, MRCP
Dr. Mehmood A. Memon, MBBS, FCPS
Dr. Nida Hussain, MBBS, Diplomat American Board of Internal Medicine
Dr. Asma Kazi, MBBS, FCPS

Dr. Muneer Sadiq, MBBS, FCPS
Dr. Faisal Moin, MBBS, FCPS

FAMILY MEDICINE

Professor & Chairperson
Dr. Jawaid Usman, MBBS, MCPS, MPH, MD, MRCGP
Associate Professor
Dr. Asif Farooqi, MBBS, FRCS, DABP Family Medicine

Assistant Professors

Dr. Muhammad Yaseen Usman, MBBS, MCPS, MRCGP(Int)
Dr. Rahila Ali, MBBS, MCPS, DCPS, MRCGP (Int)

Senior Registrars

Dr. Talat Ijaz, MBBS, MCPS
Dr. Rizwana Hashmi, MBBS, MRCGP
Dr. Javaid Habib, MBBS, MCPS
Dr. Ayesha Ishaque, MBBS

Registrar

Dr. Fouzia Mustafa Shah, MBBS, MRCGP
Dr. Abdul Basit Rao, MBBS, DFM

CARDIOLOGY

Associate Professor
Dr. Naheed Haneef, MBBS, Diploma in Cardiology, MD

Senior Registrar

Dr. Fuad Farooq, MBBS, FCPS

DERMATOLOGY

Professor
Dr. Ijaz Ahmed, MBBS, FCPS

GASTROENTEROLOGY

Assistant Professors
Dr. Muhammad Nasir Laique, MBBS, MRCP
Dr. S. M. Qamar-ul-Arfin, MBBS, FCPS (Gastroenterologist)
Dr. Shahid Mehmood, MBBS, FCPS

NEUROLOGY

Assistant Professors
Dr. Bashir Soomro, MBBS, FCPS
Dr. Nadeem Ahmed Memon, MBBS, FCPS
Dr. Sadaf Iqbal Khan, MBBS, FCPS

NEPHROLOGY

Associate Professors
Dr. Sumbal Mahmood, MBBS, Diplomate American Board (Internal Medicine & Nephrology)

Assistant Professor

Dr. Syed Ali Mohsin Raza, MBBS, MD

NUCLEAR MEDICINE

Assistant Professor
Dr. Sajid Sattar, MBBS, MD
Dr. Nosheen Haider, MBBS, MS, Diplomate Certificate Board of Nuclear Cardiology, FCPS

ONCOLOGY/RADIOTHERAPY

Associate Professor & Chairperson
Dr. M. Jawaid A. Mallick, MBBS, MCPS, MD
Assistant Professor
Dr. Qurat-ul-Ain Bader, MBBS, FCPS

PSYCHIATRY

Associate Professor
Dr. Shehla Alvi, MBBS, FCPS

Assistant Professors

Dr. Sobia Haqqi, MBBS, FCPS

Student Counselor

Qurat-ul-Ain Arif, MSc, M.Phil

GYNAECOLOGY AND OBSTETRICS

Professor & Chairperson
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Professor

Dr. Habiba Sharaf Ali, MBBS, MRCOG

Associate Professor

Dr. Anjum Afshan, MBBS, FCPS

Assistant Professors

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Dr. Urooj Malik, MBBS, FCPS

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Dr. Nigar Sadaf, MBBS, FCPS
Dr. Shazia Sultana, MBBS, FCPS
Dr. Aliya Waheed, MBBS, MCPS, FCPS

OTOLARYNGOLOGY

Professor & Chairperson
Dr. Abbas Zafar, MBBS, FRCS

Professor

Dr. Khalid Iqbal, MBBS, DLO, FCPS

Associate Professor

Dr. Khalid Hussain Mahida, MBBS, DLO, FCPS

OPHTHALMOLOGY

Professor & Chairperson
Dr. Sajid Ali Mirza, MBBS, FCPS

Associate Professor

Dr. Zafar Dawood, MBBS, FCPS

Assistant Professors

Dr. Muhammad Ayoob, MBBS, FCPS
Dr. Qurat-ul-Ain Paracha, MBBS, FCPS

PAEDIATRICS

Professor & Chairperson
Dr. Farah Agha, MBBS, FCPS

Professor

Dr. Razia Latif, MBBS, MD, DABP

Assistant Professor

Dr. M. Iqbal, MBBS, FCPS, DCH
Dr. Farhana Zafar, MBBS, FCPS

Senior Registrar

Dr. Sangeeta, MBBS

RADIOLOGY

Associate Professors
Dr. Sohail Maqbool, MBBS, MD
Dr. Anwar Ahmed, MBBS, DMRD, MD

Assistant Professors

Dr. Saleem Khemani, MBBS, MCPS, DMRD
Dr. Zareen Hussain, MBBS, MCPS
Dr. Kamran Hamid, MBBS, FCPS
Dr. Irfan A. Lutfi, MBBS, MD
Dr. Muhammad Ali, MBBS, FCPS
Dr. Aneel Kumar, MBBS, FCPS

SURGERY AND ALLIED

Professor & Chairperson
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Professor

Dr. Ahmed Fawad, MBBS, FRCS

Associate Professors

Dr. Bushra Shirazi, MBBS, FCPS
Dr. Nousheen Saeed, MBBS, FCPS
Dr. S. Wajahat Hussain Wasii, MBBS, FCPS
Assistant Professors
Dr. Imran Ahmed, MBBS, FCPS
Dr. Imtiaz Ali, MBBS, FRCS
Dr. Aruna Parsram Dawani, MBBS, FCPS
Dr. Haris Rashid Shaikh, MBBS, FRCS

Senior Registrars

Dr. Hammad Haneef, MBBS, FCPS
Dr. Khuram Sheikh, MBBS, FCPS

NEUROSURGERY

Assistant Professor
Dr. Tariq Muhammad, MBBS, FCPS

ORTHOPAEDIC

Assistant Professors
Dr. Asim Hussain, MBBS, MCPS, MS
Dr. Muhammad Sohail Rafi, MBBS, FCPS
Dr. Nadeem Akbar Baloch, MBBS, FCPS
Dr. Muhammad Khalid, MBBS, FCPS
Dr. Idrees, MBBS, FCPS

Senior Registrar

Dr. Naseem Munshi, MBBS, FCPS

BASIC HEALTH SCIENCES (BHS)

Lecturers
Dr. Afshan Iftikhar, MBBS
Ms. Areeba Qamar, MSc
Dr. Bilal Aheed, MBBS
Dr. Dunes Kumar, MBBS
Dr. Fauzia Parveen, MBBS

Dr. Ghazala Masood Farukh, MBBS

Dr. Humera Akhlaq, BDS
Dr. Iffat Raza, MBBS
Dr. Javeria Arab, BDS
Dr. Madeeha Sadiq, MBBS
Dr. Mehwish Zafar, MBBS
Dr. Marukh Qasim, MBBS
Mr. Moazzam Ali Shahid, MSc
Dr. Mobina Sohail, BDS
Mr. Muhammad Haris Lucky, MSc
Dr. Muhammad Noman Rashid, MBBS
Dr. Muhammad Wasif Saleem, BDS
Dr. Nadya Ameen, MBBS
Dr. Nazia Moin, MBBS
Dr. Rahilla Razzak, BDS
Dr. Sadaf Shaheen, MBBS
Dr. Saher Mushtaque, BDS
Dr. Sahrish Mukhtar, MBBS
Dr. Samina Mohyuddin, MBBS
Dr. Sanniya Farukh, MBBS
Dr. Santosh Kumar, MBBS
Dr. Sarwat Rizwan, BDS
Dr. Syed Nudrat Nawaid Shah, MBBS
Dr. Syed Sohail Abbas Naqvi, MBBS
Dr. Syed Zaryab Ahmed, MBBS
Dr. Uzma Najam, MBBS
Dr. Hira Atique, MBBS
Dr. Fatima Ali Raza, MBBS
Dr. Maria Mohiuddin, MBBS
Dr. Mariam Masroor Faridi, MBBS
Dr. Sabeen Akbar Yezdani, MBBS
Dr. Moneeza Lodhi, MBBS
Dr. Rosheena Anjum, MBBS
Dr. Sabeen Shehzad, MBBS
Dr. Irrum Faisal, MBBS
Dr. Muhammad Aamir, MBBS

ZIAUDDIN UNIVERSITY



COLLEGE OF DENTISTRY



COLLEGE OF DENTISTRY

I am a fourth year dental student at Ziauddin College of Dentistry. The teaching here is amazing. We are always pushed to do more, and that is very challenging. Our senior faculty is very encouraging and the best at what they do. The staff in the dental college is committed to teaching and development of students as dental practitioners.

Looking back over the last three years, it has been an amazing journey. I am incredibly satisfied with my decision to enter this profession and am eager to see how wonderful the future will be. This year has been more exciting than my third year. You are in the clinic more and the classroom less. There is also the transitional feeling from dental student into a doctor as you approach the end of the academic year. I enjoy coming to university everyday to see my patients who I have bonded with while being able to provide them with dental services.

My advice to all of you who are pursuing dentistry is if you really want something, you have to work hard for it.

ZUHA KHAN
FINAL YEAR STUDENT

INTRODUCTION

Ziauddin College of Dentistry started its BDS program in January 2010 with the mission to prepare confident dental professionals who are committed to excellence in the field of patient care and research that widens the horizon of knowledge particularly in relation to community health problems. The first batch of College of Dentistry graduated in November 2013 and is doing house job at Clifton Campus.

At Ziauddin College of Dentistry, a student is identified as an adult learner and is expected to develop as a responsible individual taking care of community dental problems.

PROGRAMS OFFERED

Ziauddin College of Dentistry offers following undergraduate and postgraduate programs which are

recognized by the Pakistan Medical and Dental Council (PMDC). PMDC is the regulatory body responsible for issuing license to practice dentistry.

UNDERGRADUATE DEGREE PROGRAM

Bachelor of Dental Surgery (BDS)

POSTGRADUATE DEGREE PROGRAM

M.Phil In Oral Biology

M.Phil In Oral Pathology

WHAT'S NEW FOR 2015

Ziauddin College of Dentistry will be starting FCPS/ MCPS training in the department of Oral and Maxillofacial Surgery this year. The clinical departments of Ziauddin College of Dentistry are equipped with state of the art equipments which are supported by highly qualified, well trained and experienced faculty.



UNDERGRADUATE DEGREE PROGRAM BACHELOR OF DENTAL SURGERY (BDS)

Ziauddin College of Dentistry offers a four year undergraduate degree program leading to Bachelor of Dental Surgery (BDS), under the cooperative auspices of Ziauddin University.

COURSE DETAILS

BDS program is divided into 4 Academic years, each year comprises of a number of modules related to subject specific scientific information, in accordance with PMDC recognized curriculum. Ziauddin College of Dentistry has taken the initiative of developing and implementing a horizontally integrated curriculum. The curriculum makes use of latest teaching strategies, which are aimed at providing better quality of education to the students.

TEACHING STRATEGIES

The college recognizes the challenges met by students once they enter into professional lives. Therefore, students are empowered to adapt to the different ways of absorbing information and take responsibility of their own learning using student centred learning strategies such as Problem Based Learning (PBL) and Case Based Sessions (CBS). Community Oriented Education is also given its due importance in the College of Dentistry

Students are actively involved in the learning process by interacting in small groups and by collecting, analysing and synthesizing information relevant to the problems they are going to face in their professional lives.

PROBLEM BASED LEARNING

PBL is one of the strategies adopted for learning at the Ziauddin College of Dentistry. This approach is characterized by:

- Opportunities to deal with problems students are going to face in later professional practice.
- Emphasis on selfmotivation and responsibility for learning on their own
- Training for learning professional skills, leadership qualities and team work.

The aim of problem based learning is to overcome various drawbacks in the traditional methods of instruction; for instance the passive role of students during lectures, irrelevant subject matter in the curriculum and lack of integration between disciplines.

LABORATORIES

Basic Dental and Medical Science laboratories and Dental OPDs are fully equipped with state of the art equipments, models and other teaching aids ensuring an excellent academic environment for students.

STUDY GUIDE BOOK

On the commencement day, students are given course/study guides which contain the course objectives and teaching strategies for 1st semester of BDS with the planner for the entire semester. The study guide also identifies all rules and regulations that the student is required to abide by. Likewise, for the subsequent semesters study guides are supplied to all promoted students on the respective semester orientation days.

Framework of Curriculum for BDS			
Course Titles			
YEAR I	YEAR II	YEAR III	YEAR IV
Oral Biology & Tooth Morphology	Science of Dental Materials	Community & Preventive Dentistry	Oral & Maxillofacial Surgery II
Anatomy	Oral Pathology	Oral Medicine/ Periodontology	Operative Dentistry II
Physiology	General Pharmacology	General Medicine	Prosthodontics II
Biochemistry	General Pathology	General Surgery	Orthodontics
	Non – Examinable	Non – Examinable	
	Junior Prosthodontics/ Junior Operative	Operative Dentistry I	Prosthodontics I
		Oral & Maxillofacial Surgery I	

CLINICAL TRAINING

In addition to the theoretical knowledge, it is important that the students have a significant exposure to the curative, preventive and rehabilitative facets of oral and general health care.

The first exposure of the dental students to a clinical environment starts in their 2nd professional year, where students are first trained on phantom heads about the clinical aspects of treatment and soon after are taken for their field visits to the community settings as part of their community dentistry training and primarily they are trained for detailed history taking or dental records.

Third year BDS students receive clinical training for General Medicine, General Surgery and other Clinical subjects of BDS curriculum at the following hospitals:

- Dr. Ziauddin Hospital, Clifton Campus - 150 bedded Hospital
- KDLB Kemari Campus - 125 bedded Hospital.
- Clinical Departments (OPD) for Ziauddin College of Dentistry, Clifton Campus having 75 dental Units.

The students attend OPDs and wards where they obtain first-hand knowledge by dealing with patients under faculty supervision. Apart from clinical learning under the supervision of faculty of medicine, the students also work in the clinical departments of Periodontology, Oral Medicine, Oral Surgery, Operative Dentistry and Prosthodontics where they gain experience with patients and are trained in different clinical procedures.

In the final year, students spend most of their time in Dental OPDs in the department of Oral Surgery, Prosthodontics, Operative dentistry and Orthodontics. Their training includes not only performing procedures on patients, but also learning crucial skills that help to groom their

interpersonal and professional behaviour and attitudes

EXAMINATION / STUDENT ASSESSMENT**General Principles**

It is recognized that the methods of assessment have a strong influence on shaping students' learning approach. At Ziauddin College of Dentistry, the structure, content and process of all assessments are designed to reflect and reinforce the specified learning objectives at each stage of the program. Assessments serve the purpose of providing feedback to the students and the faculty as well as certification.

Semester Examination

It is conducted by the examination department of Ziauddin University. Examinations are held at the end of each semester. At least 80% attendance in each course is mandatory for eligibility to appear in the semester examination. Promotion to next class is based on passing all the courses scheduled in a year.

Tools of Assessment

- BCQ and Multiple Choice Questions (BCQs/MCQs).
- Short essay questions (SEQs).
- Objective Structured Practical/Clinical Examinations (OSPE).
- Oral examination/viva is used to assess knowledge mainly of a higher level.

ELECTIVES

Ziauddin College of Dentistry encourages BDS students to apply for electives or internships in institutions which may not be a part of the Ziauddin group of hospitals. Students have an option to undergo this training in Pakistan or abroad.

This experience allows them wider exposure and enables them to develop interest in a particular area

BDS GRADUATES REGISTRATION

As per Pakistan Medical and Dental Council (PMDC) rules, registration of BDS graduates is mandatory for dental practice and postgraduate education in Pakistan and abroad.

HOUSE-JOB TRAINING

Ziauddin University Hospitals offer house job to its graduates. A structured training program has been designed that allows house officers appropriate training in all domains of dentistry. In addition, house officers have opportunity to participate in multidisciplinary seminars and academic or clinical conferences. House job training is conducted strictly according to PMDC guidelines.

BDS ADMISSION POLICY

Admission to Ziauddin College of Dentistry for a four year BDS degree course is open to all individuals who meet the selection criteria. All candidates are selected for their academic achievements and potential.

Students are admitted to the first year of BDS on previous high school and/or college academic record, and score in test and interview conducted by the Ziauddin University. Selection of student is on the basis of an admission policy approved by the Governing Body of Ziauddin University, which is in line with the regulations of Pakistan Medical and Dental Council. Students are largely admitted in the category of local residents. Only a few seats are available for overseas students.

I. ADMISSION CRITERIA FOR LOCAL STUDENTS

The general criteria for students seeking admission to BDS degree program are as follows:

Minimum 60% marks in Pre-Medical group of Higher Secondary Certificate Examination held by a recognized Board of Intermediate Education in Pakistan. Local and

overseas students are required to take a written test (MCQs) and appear for an interview. Proficiency in English language, both in written and verbal expression is required.

With GCE Cambridge/London, 'Advanced level' (A level), American High School Diploma, and other equivalent Certificates or Diplomas, an equivalence to HSC (Pre-Medical) will be decided as per the guidelines of HEC. Students with American High School Certificate are also required to submit SAT-II with a minimum recommended score of 550 in subjects of Biology, Chemistry and one more Science subject.

Documents to be submitted for admission:

- Duly filled in admission form of Ziauddin College of Dentistry.
- Photographs (5 passport size).
- One copy each of mark sheets of Secondary School Certificate (SSC Part I and II).
- One copy of Secondary School Certificate (if available).
- One copy each of mark sheets of Higher Secondary Certificate (HSC Part I and II Pre-Medical).

If results of HSC Part II have not been declared by the concerned Board, admit card of HSC Part II examination must be submitted.

- For students with GCE Cambridge/London, one copy each of the transcripts of 'O' level and 'A' level examination results
- One copy of National Identity Card (in case NIC is not available, 'B' form with a copy of Parent's / Guardian's NIC must be submitted).



II. ADMISSION CRITERIA FOR OVERSEAS STUDENTS

The university has defined the category of Overseas Students as follows:

- i) Wards of Pakistanis residing abroad.
- ii) Students sponsored by their relatives or friends residing abroad.
- iii) Students who have graduated from Overseas Pakistani Schools

Note: Change to Local Resident status will not be allowed to those admitted as Overseas Students.

Documents to be submitted for admission:

- Duly filled in application form of Ziauddin University along with the required non-refundable fee in US dollars.
- One copy each of mark sheets of Secondary School Certificate (SSC Part I and II).
- One copy of Secondary School Certificate (if available).
- One copy each of Higher Secondary Certificate mark sheets (HSC Part I and II Pre-Medical).
- In case the result of HSC Part II has not been declared by the concerned Board, photocopy of admit card of HSC Part II examination must be submitted.
- For students completing GCE, Cambridge/London, one copy each of 'O' and 'A' Levels transcripts.

III. FOR HIGH SCHOOL GRADUATES OF USA /CANADA

- One copy of High School Certificate (Grade 9-12 or 13) attested by the School Principal/ Officer
- SAT-II with minimum score of 550 in subjects of Biology, Chemistry and one more Science subject

Note: Before submitting applications, applicants must ensure that they have complied with the instructions given with the application form. It remains the responsibility of the applicant to submit application according to the

instructions. Students are expected to submit photocopies of documents along with the application and originals for the purpose of verification by the university. If required, the university will check the authenticity of the documents submitted with the concerned school, college, board or university.

IV. ADMISSION TEST

The university conducts an Admission Test for all eligible local and overseas candidates. The test consists of Multiple Choice Questions of various types. The test comprises of four to five sections designed to assess each applicant's performance in the areas of

- (a) Biology
- (b) Chemistry
- (c) Physics
- (d) General Knowledge
- (e) Aptitude
- (f) English

The level of questions in sections of Biology, Physics and Chemistry corresponds to that expected at the end of Intermediate Examination or equivalent qualifications e.g. 12th Year etc.

V. INTERVIEW

Short listed applicants will be interviewed to assess their suitability to complete BDS course and pursue a career in health sciences.

VI. NOTIFICATION OF ADMISSION

The Registrar of the university will notify students who are successful in the admission process. Successful applicants are given a deadline by which to accept the offer of admission. Offers not accepted by the given deadline are cancelled.

VII. REQUIREMENTS FOR SELECTED STUDENTS

Successful students selected for BDS program are expected to fulfill the following:

a) Verification of Educational Testimonials

Original transcripts, mark sheets and certificates to be brought for verification by the university.

b) Medical Examination

The undergraduate medical program is both physically and mentally demanding. Students offered admission are required to undergo a comprehensive medical examination including laboratory investigations and chest X-ray, before they are allowed to join classes.

c) Immunization

Clinical experience carries a small personal risk of infection. In their own interest, and also in the interest of patients and others, students must provide evidence of immunization against the following: Tuberculosis (BCG), Diphtheria, Poliomyelitis, Pertussis, Hepatitis B, Tetanus, Measles/Mumps (and Rubella for females)

d) Payment of Fee

On receiving offer of admission from the Registrar of the University, students are expected to deposit the required (non-refundable) admission and tuition fee by the due date mentioned in offer letter. If the required fee is not submitted within the specified date the admission will stand cancelled.

FINANCIAL POLICY

Students seeking admission to BDS first year of Ziauddin University are expected to pay the fee approved by the Governing Body of the University. Admission fee is submitted only once, at the time of admission. For subsequent years, students are required to pay only the tuition fee.

For local students, fee will be paid in Pakistani currency and for overseas students in US dollars.

Parents/guardians are advised to ensure that fee for each

academic year is paid by the due date. The university reserves the right to cancel admission if the fee is not paid by the due date.

Students who repeat the year due to failure or otherwise are required to pay the tuition fee for the year being repeated. The university does not handle cash or personal cheques. Fee must be paid in the form of pay order payable to Ziauddin University.

FEE STRUCTURE

Local Residents

Prospectus and Application Form	Rs. 2,000/-
Application Processing Fee	Rs. 2,000/-
Admission Fee	Rs. 200,000/- (Non Refundable)

Tuition Fee (Current Structure)

Year 1	Rs. 600,000/- per annum
Year 2	Rs. 600,000/- per annum
Year 3	Rs. 600,000/- per annum
Year 4	Rs. 600,000/- per annum

Overseas Applicants

Prospectus and Application Form	US \$ 100
Admission Fee	US \$ 3,000
Tuition Fee (Current Structure)	
For BDS 1st and 2nd year	US \$ 10,000 per annum
For BDS 3rd and 4th year	US \$ 12,000 per annum

Other Charges for both Local and Overseas students:

Security deposit	Rs. 2,000/-
Medical examination fee	Rs. 5,000/-
Graduation fee	Rs. 7,000/-

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.



DEPARTMENT OF POSTGRADUATION AND RESEARCH

Department of Postgraduation and Research is responsible for:

- Conceptualizing, designing and implementing policies and strategies for research programs of the college.
- Developing policies and implementing strategies for establishing linkages with national and international universities for the promotion of research in line with the University objectives.
- Developing research related infrastructure.
- Developing postgraduate programs in dentistry like MDS, MCPS, FCPS, M.Phil and Ph.D

Goals

- Initiate research programs in different disciplines of Dentistry.
- Collaborate research activities between Medical and Dental sections of Ziauddin University.
- Collaborate research activities with national and international universities.
- Strengthen the already running M.Phil program in Basic Dental Sciences.
- Start MCPS, FCPS, MDS and PhD programs.



POSTGRADUATE PROGRAM IN BASIC DENTAL SCIENCES (M.PHIL. IN ORAL BIOLOGY AND ORAL PATHOLOGY)

The postgraduate program for basic dental science subjects started at Ziauddin College of Dentistry in 2011.

The program is recognized by Pakistan Medical and Dental Council and follows regulations for registration to research studies leading to the degree of M.Phil. in the subjects of Oral Biology and Oral Pathology.

The M. Phil. program of Ziauddin University has been devised with a view to producing self-motivated individuals who wish to further their careers by gaining a higher qualification.

CURRICULUM

The curriculum of M.Phil in Basic Dental Sciences is covered in three years. First two years comprise of two semesters each year.

Year One

The curriculum content of two semester of year one are arranged in different modules. The student evaluation is carried out at the end of modules and at the end of each semester.

Year Two

As recommended by HEC second year of M.Phil is spread over 48 weeks of course/laboratory work and research. In the second year students are required to submit their synopsis in the field of their interest.

Year Three

In year three candidates are required to carry out their research work and are exposed to advance techniques and finally present their thesis for defense.

Evaluation

Semester examinations include written as well as Viva Voce / Oral components.

At Ziauddin University, candidates are given an opportunity to learn the fundamentals of Educational Methodology while participating in conducting an undergraduate program. This is achieved by means of regular meetings and workshops held by the Department of Education. In addition to this, candidates are encouraged to gain on job experience by giving lectures, taking part in problem-based learning (PBL) sessions, practical and tutorials

Framework of Curriculum for M.Phil Dental Sciences					
YEAR I		YEAR II		YEAR III	
SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4	SEMESTER 5	SEMESTER 6
Module I-III	Module IV-VI	Module VII-VIII	Module IX-X		
CORE COURSE: Basic Sciences		CORE COURSE: Oral Pathology Oral Biology		Thesis Writing: Publication of articles (2)	
ANCILLARY COURSE: Descriptive Epidemiology Basic biostatistics		ANCILLARY COURSE: Analytical Epidemiology Inferential Biostatistics Research Methodology		ANCILLARY COURSE: Educational Methodology	
MEDICAL EDUCATION WORK-SHOPS: Teaching methodology PBL MCQ writing & assessment tools		SYNOPSIS WRITING		THESIS DEFENCE	
JOURNAL CLUB SEMINARS					

ELIGIBILITY CRITERIA

- Candidates possessing BDS degree from a HEC recognized university
- M.Phil. entry test / NTS GAT
- Interviews of candidates shortlisted on the basis of

performance in the M.Phil. entry test. Final selection of the candidates is based on the previous academic records, experience, entry test and interview.

FACULTY MEMBERS

TEACHING AND LEARNING STRATEGIES

- Seminars, demonstrations and presentations
- Case discussions
- Rotations in Clinical laboratories for relevant training
- Update of knowledge through study of recent journals and internet browsing. Journal clubs and group discussion

SUPERVISORS OF M.PHIL PROGRAM

Oral Biology

- Prof. Dr. Nuzhat Hassan (MBBS, M.Phil)
- Dr. Aneel Kumar (BDS, FCPS) Assistant Professor
- Dr. Sarwat Memon (BDS, FCPS) Assistant Professor

Oral Pathology

- Prof. Dr. Naila Hadi (MBBS, M.Phil)
- Dr. Noor ul Wahab (BDS, FCPS) Associate Professor
- Dr. Atif Bashir (BDS, FCPS) Assistant Professor

FEE STRUCTURE

Admission fee:	RS: 25,000/-
Tuition fee:	RS: 50,000/- (per semester)
Examination fee (defence of thesis)	RS: 50,000/-
Semester Examination Fee	RS: 5,000/-

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

CAREER OPPORTUNITIES

A graduate with a BDS degree is open to endless opportunities in clinical and non-clinical specialties locally and internationally. Students can pursue clinical postgraduate training or fellowship programs. Students who choose not to undergo clinical postgraduate training or fellowships can opt to do Masters or Ph.D in the field of their choice which will help them to become full time academicians.

Self-employment is also a promising avenue. With experience, a dental graduate can start his/her own individual clinic. Many dentists prefer private practice as it provides the best financial prospects along with a greater level of independence.

CONTACT DETAILS

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PRINCIPAL

Prof. Dr. Nuzhat Hassan (MBBS, M Phil)
Chairperson Department of Anatomy

DEPARTMENT OF SCIENCE OF DENTAL MATERIALS

Dr. Shoaib Khan (BDS, MSc)
Assistant Professor & HOD
Dr. Shafaq Saeed (BDS)
Lecturer
Dr. Sana Ikram (BDS)
Lecturer
Dr. Sana Amir Ali (BDS)
Lecturer

DEPARTMENT OF COMMUNITY DENTISTRY

Dr. Amir Akbar Shaikh (BDS, MSc)
Assistant Professor & HOD
Dr. Mustafa Naseem (BDS, MSc)
Sr. Lecturer
Dr. Mohammad Arsalan Raffat (BDS)
Lecturer
Dr. Haseeb Pervaiz (BDS)
Lecturer

DEPARTMENT OF ORAL BIOLOGY

Dr. Zeeshan Qamar (BDS, MSc)
Sr. Lecturer & HOD
Dr. Fayez Niazi (BDS, MSc)
Sr. Lecturer
Dr. Sadia (BDS)
Lecturer
Dr. Fizza Saher (BDS)
Lecturer
Dr. Ali Abid Mirza (BDS)
Lecturer

DEPARTMENT OF ORAL PATHOLOGY

Dr. Salima Mehboob Ali (BDS, MSc)
Assistant Professor & HOD
Dr. Saima Akram Butt (BDS)
Sr. Lecturer
Dr. Sana Mirza (BDS)
Lecturer
Dr. Jabbar Ahmed Qureshi (BDS)
Lecturer

DEPARTMENT OF ORAL MEDICINE

Dr. Afifa Razi (BDS, FCPS)
Assistant Professor & HOD
Dr. Saifullah Khan (BDS, MSc)
Sr. Registrar
Dr. Nausheen Nazir (BDS)
Lecturer
Dr. Naushaba Anees (BDS)
Lecturer
Dr. Fatima Farhan (BDS)
Lecturer

DEPARTMENT OF PERIODONTOLOGY

Dr. Atif Iqbal Butt (BDS, MCPS)
Sr. Registrar & HOD
Dr. Ayesha Saghir (BDS)
Lecturer
Dr. Faiza Shah (BDS)
Lecturer
Dr. Zaeem Abbassi (BDS)
Lecturer

DEPARTMENT OF ORAL SURGERY

Dr. Noor ul Wahab (BDS, FCPS, FFDRCSI)
Associate Professor & HOD
Dr. Atif Bashir (BDS, FCPS)
Assistant Professor
Dr. Nadeem Chand (BDS)
Lecturer
Dr. Huzaifa Saeed ul Khair (BDS)
Lecturer
Dr. Jouhrah Hussain Khan (BDS)
Lecturer

DEPARTMENT OF ORTHODONTICS

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Assistant Professor
Dr. Zehra Saqlain (BDS)
Lecturer
Dr. Rabia Maniar (BDS)
Lecturer
Dr. Saima Thaheem (BDS)
Lecturer
Dr. Saba Lakhani (BDS)
Lecturer

DEPARTMENT OF PROSTHODONTICS

Dr. Muhammad Abbas (BDS, FCPS)
Associate Professor & HOD
Dr. Haroon Rashid (BDS, MSc)
Assistant Professor
Dr. Ayesha Hanif (BDS)
Lecturer
Dr. Tahira Haider (BDS)
Lecturer
Dr. Summon Naseem (BDS)
Lecturer

DEPARTMENT OF OPERATIVE DENTISTRY

Dr. Hina Ahmed (BDS, FCPS)
Assistant Professor & HOD
Dr. Hamza Masood (BDS)
Lecturer
Dr. Shahper Shehryar (BDS)
Lecturer
Dr. Tahara Jamil (BDS)
Lecturer

ZIAUDDIN UNIVERSITY



FACULTY OF PHARMACY



FACULTY OF PHARMACY

I am Dr. Sehrish, had done my Pharm.D as a Position holder from Ziauddin Faculty of Pharmacy.

For me, Pharmacy from Ziauddin provided me a comprehensive foundation of medicines knowledge and embraced me with professional skills to enrich my practices in this field. In Ziauddin, I thoroughly enjoyed the learning environment where exchange of ideas with diverse group is always appreciated. It is Ziauddin who has given me the confidence to enlighten the way for my future endeavors.

I also like the fact that Ziauddin Faculty of Pharmacy is distinct with many facilities such as; its own Hospital and Clinical settings in three different campuses, facilitating Industrial tours and educational trips. It is the best place to study I've ever experienced. I would highly suggest to those who are eager to learn pharmacy and pursue their knowledge in an effective way.

Now I have the honor to be a member of the teaching faculty and feeling pride serving this great university named after Dr. Sir Ziauddin Ahmed.

DR. SEHRISH LAKHANI – BATCH III
(GRADUATED IN 2011)

INTRODUCTION

Pharmacy, along with medicine and nursing forms the backbone of our national health care system. We can not afford to remain behind other developing nations in providing quality drugs to our masses and professional manpower to our health care institutions. We have to cater the needs of this system by producing well qualified, professionally trained and highly competent pharmacists to perform the specialized tasks in their specific areas of activity, such as drug design, synthesis, manufacturing, quality assurance, marketing and supply system, procurement, storage, distribution and use of drugs in industry, hospital setting or in community practice. In all advanced health care systems the support of a clinical pharmacist, who is a drug therapy consultant and drug information specialist, is considered a must. Realizing the

importance of Pharmacy education, Ziauddin University started its 5 years Doctor of Pharmacy (Pharm.D) programme in January 2005. The Pharmacy institution of Ziauddin University is following the curriculum approved by Higher Education Commission (HEC) & Pharmacy Council of Pakistan (PCP) based on the semester examination system. **This is an accredited and recognized programme of Pharmacy Council of Pakistan.**

The program of study will provide students with core of knowledge, skills, abilities, attitudes and values that are necessary to the provision of Pharmaceutical care. The professional courses in the Pharm.D curriculum consists of didactic material, laboratory courses, and practical experience in patient care environment.



GOALS

Ziauddin believes in "professionalism". The key values include acting in a patient's interest, responsiveness to the health need of society, maintaining the highest standards of excellence in the practice of Pharmacy and in the generation and dissemination of knowledge. In addition to knowledge and skills, pharmacists should present psychosocial and humanistic qualities such as caring, empathy, humility and compassion, as well as social responsibility and sensitivity to people's culture and beliefs. We believe that all these qualities are required to ensure safe and effective medication use which can be achieved through the design of educational programs.

SCOPE / AIM

Today, the Pharmacist's attention is directed towards the patient, his environment, and his state of general well-being. Today, pharmacy profession has undergone a transformation whereby both practice and teaching of this area has been placed on more quantitative, rational and scientific bases, so much so that the Drug Orientated Pharmacy has now attired itself to Patient Oriented Pharmacy in United States and Canadian Universities. Accordingly Pharmacy Council of Pakistan (a subsidiary body of Ministry of Health, Government of Pakistan) which is regulating Pharmacy education in Pakistan felt the global changing trends and therefore adopted a 5 years Doctor of Pharmacy (Pharm.D) programme instead of 4 years B.Pharm program in 2004 all over Pakistan.

WHAT'S NEW FOR 2015

PHARM.D UP GRADATION CERTIFICATE PROGRAMME

This programme will be offered to Pharmacy graduates of any University, who have already completed B.Pharm degree and are registered with respective Provincial Pharmacy Councils of Pakistan. At the end of the programme they will be awarded a certificate of equivalency of Pharm.D.

POST BACCALAUREATE DEGREE PROGRAMME

A two year programme for B.Pharm graduates and a one year programme for Pharm.D graduates from any University will be offered, at the end of which they will be awarded a Post Baccalaureate Degree.

PHARMACY TECHNICIAN CERTIFICATE PROGRAMME

Pharmacy technician is the one who assists the pharmacist during dispensing and retail pharmacy. This course will be basically offered to those candidates who have at least a Matric (Science Group) Certificate and are working in a Medical Store or Pharmacy.

PROGRAMS OFFERED

1) Doctor of Pharmacy (Pharm.D) Program

5 years Program, approved by Pharmacy Council of Pakistan.

2) M.Phil and Ph.D Program

The duration of M.Phil and Ph.D program is as under:

- M.Phil minimum 2 and maximum 5 years from the date of provisional admission.
- Ph.D minimum **2 years** and maximum 7 years from the date of provisional admission.



DOCTOR OF PHARMACY (Pharm.D) PROGRAM

The program of Pharm.D at Ziauddin Faculty of Pharmacy is to produce pharmacists who have the abilities and skills which are necessary to achieve outcomes related to:

- Providing Pharmaceutical care to patients.
- Developing and managing medication distribution and control systems.
- Monitoring drug response in patients and adjusting dosage regimens to produce the safest, most beneficial results in therapy.
- Managing the pharmacy.
- Promoting public health.
- Providing drug information and education.
- Providing technical aid to Pharmaceutical industry and solving problems pertinent to the manufacturing of medicines.
- Reviewing products evaluated for formulary consideration.
- Evaluating policies, procedure, protocols and clinical pathways to ensure safe use of medications.
- Analyzing quality assurance activities to ensure that improvements are implemented to produce positive patient outcomes.

ELIGIBILITY CRITERIA

The candidate should have passed the Intermediate Science (HSC) Examination (Medical/ Biology Group) securing at least 60 % marks in aggregate from the Board of Higher Secondary Education in Pakistan or any other examination of a Foreign University of Examination Body which in scope and standard is found equivalent to the I.Sc. Examination (Medical Group) of a Pakistan Board of Higher Secondary Education.

CLINICAL TRAINING

Students of Pharm.D are lucky to be a part of an institute with large set-up of hospital & clinical practice. To make best use of this opportunity, we have given much emphasis

on the clinical side of the profession which is the very soul of Pharm.D programme. This is a requirement of the curriculum as approved by Pharmacy council. This training also provides a better chance of learning and practicing the skills in these fields than elsewhere (No Pharmacy institution in the country has such an ideal situation for the training for their Pharm.D students as Ziauddin University has).

This training enables these future Pharmacists to play a vital role in the improvement of quality of healthcare in our society. This will bring a unique difference between its graduates and graduates of other Pharmacy institutions of the country. It will not be out of place to mention that Pharm.D is a patient oriented program rather than product oriented four years B.Pharm Course of the past.

Students of 4th & 5th Professionals complete this training in Pharmaceutical service centers (In-patient pharmacy, emergency room pharmacy, ambulatory dispensing area, bulk store, out-patient pharmacy, satellite pharmacy) and different wards (Medical ICU, Cardiac care unit, Neonatal care unit, cardiac ward, Neuro. / Psychiatry ward, Gastroenterology ward, Gynae ward, Pediatric ward, Dialysis centre). This training is conducted at all three campuses of Dr. Ziauddin University Hospital i.e. North Nazimabad, Clifton & Kemari (KDLB).

The main objectives of clinical training are:

- To develop students' communication skills for effective interaction with patients and with practitioners of other health professions.
- To help students develop a patient awareness in the practice of Pharmacy.
- To enable students to integrate the knowledge acquired in course work prior to clinical exposure, and to apply it to the solution of real problems, and to help students become more aware of the general methods of diagnosis and patient care specifically related to drug therapy.

COMMUNITY PHARMACY TRAINING AT ZIAUDDIN

Community pharmacy training programs focused on advancing skills in direct patient care, patient care service development, and practice management. Following are the main objectives of our community training:

- To produce professionally competent pharmacists.
- To serve the community as a drug specialist.
- To enable the students to have sound knowledge and practical exposure to;
 - Community Pharmacy and its organization.
 - Epidemiology and its control.
- To educate and counsel the patient.
- To control drug abuse and misuse.
- To control drug inventory.
- To develop a better understanding of principles of health promotion and patient care programs such as immunization, etc. in community.

PHARMACY RESIDENCY PROGRAMME

In order to expand Pharm.D graduates professional skills and to develop a patient oriented attitude, one year Pharmacy Practice Residency programme has been started in clinical and hospital pharmacy. This is a one year training program for the graduate of Ziauddin Faculty of Pharmacy. The program aims to provide professional experience in different fields of pharmacy practice such as inpatient pharmacy, outpatient pharmacy, oncology pharmacy, nutrition pharmacy etc.

At the end of this programme, certificates are awarded to graduates who successfully complete the programme. During the residency period a reasonable stipend is also given to the trainees. This is the only institution of Pakistan which offers such specialized training programme based on Pharmaceutical care system.

INDEPENDENT CLINICAL PHARMACY ROUNDS

The objective of this program is to ensure rational use of medicines in Dr. Ziauddin Hospital. It allows the clinical pharmacy faculty to specialize in clinical pharmacy practice and developing clinical skills such as patient

profile review, drug information, patient medication history and discharge patient counseling.

EXTRACURRICULAR ACTIVITIES

i) Student's Activities

Students of Pharmacy always remain at the forefront in organizing activities of academic & non Academic nature. Very recently the students of final year organized a spring carnival & a talent show which involved the participation of students from first to fifth year. We also have sports facilities for the students which include the following inter and intra departmental games like:

- Cricket Matches
- Foot Ball Matches
- Table Tennis
- Badminton etc.

ii) Annual Picnic

STUDENTS' ADVISOR

The role of student advisor is to provide;

- Academic progress support for student.
- Helps the students with program planning course selections and to approach to successful goal achievement.
- Assisting students in development of functional educational plans.

TEACHING SYSTEMS

The following learning methods/strategies are used to promote better understanding;

- PBL (Problem Based Learning)
- Lectures
- Practical
- Assignments
- Presentations / Seminars
- Fields visit
(Clinical Training / Pharmaceutical Industries)



SELF DIRECTED STUDY

Students may achieve objectives by assuming responsibilities of their own learning. HOW? By sharing and discussing with peers, working individually, seeking information from Learning Resource Centre (LRC)/ Library, inter and intranet, teachers and resource persons within the faculty. Students can also make presentations and assignments and discuss or learn about the upcoming topics that are already mentioned by the teachers in the schedule. This is possible by utilizing scheduled self-study period in the faculty.

INDUSTRIAL VISITS

Industrial tours to different pharmaceutical industries are arranged frequently to aware the students with basic practices of manufacturing, quality control and quality assurance of medicines. These tours enable the students to relate their theoretical knowledge with different unit operations involved in dosage forms manufacturing and different QC and QA techniques to maximize the product quality.

SEMESTER SUMMARY**FIRST PROFESSIONAL**

Pharmaceutical Organic Chemistry: Organic chemistry is more than simply the study of carbon and hydrogen or the study of chemicals in living organisms. Organic substances are pretty crucial in our lives. Most of our drugs are organic compounds. The course is designed to illustrate the importance of organic compounds aromatic, cyclic, heterocyclic, polycyclic aromatic through discussion of their nomenclature, synthesis, and reaction with a concentration on their medical and pharmaceutical importance.

English: The course of English is one of the compulsory subjects, which is taught in first two semesters, where the focus is on all four language skills i.e. reading, writing, speaking and listening. In the first semester, students study the basics of the four skills, along with the technicalities of grammar while, in the second semester the focus is shifted to academic reading and writing according to their professional and academic needs of Pharm.D

Physiology: This course represents the core of the basic health sciences towards understanding Pathophysiological processes, mechanism of drug action and applying rationale pharmacotherapeutic decision-making in the treatment of disease.

Anatomy and Histology: Anatomy is the body's different system i.e. gross anatomy including CNS, CVS, reproductive, tissue, urinary, respiratory, endocrine etc. Histology is the study of cellular system. The objective of this course is to ensure that students achieve an understanding of structural biology of the major body systems relevant to Pharmacy and of the anatomical and histological features of common diseases amenable to drug therapy.

Biochemistry: This course helps the student to understand how drug molecules are metabolized by many biochemical reactions in presence of enzymes. This helps to avoid drugs which have poor metabolism or those with excessive side effects from being prescribed or dispensed to the patients.

Physical Pharmacy: Physical Pharmacy is the basic course related to physical aspects of pharmacy where the student applies his / her knowledge of Physics, Chemistry and Biology obtained during their intermediate studies to the development of a drug with a highly accessible approach, this course will help students comprehend and apply the principles of Physical Pharmacy in clinical practice.

SECOND PROFESSIONAL

Mathematics: Mathematics is an important tool in most scientific courses. This course focuses on solution of linear equations, progression, logarithm, analytical geometry, differential and integral calculus.

Statistics: This course focuses on application of Statistics in biological and Pharmaceutical Science. It is an introductory course covering presentation of data, graphing, measure of central tendency and dispersion, probability distributions (Binomial, Poisson, Student "t", "Z" and "F"), hypothesis testing, analysis of variance, regression, and correlation.

Pharmaceutical Preparation: The course deal with formulation aspect and quality control test and other activities of classical and modern dosage form (galenical preparation, solution, syrup, elixir, spirits, gel, magma, tablets, capsule, powder, emulsion, and suspension).

Pharmacognosy: This is a course in which students get idea about history of Pharmacognosy of different medicinal system, importance origins, their adulteration, evaluation, & classification. Importance of plant growth regulation and enzymes, and also get knowledge about poisonous plants and allergy producing plants.

Pharmaceutical Microbiology: Pharmaceutical Microbiology is a discipline deal with the primary knowledge of Microorganisms, Immunology and Hypersensitivity. Drug safety is a major focus of Pharmaceutical Microbiology. Pathogenic bacteria, yeasts, moulds and toxins produced by microorganisms are all possible contaminants of medicines – although stringent regulated processes are in place to ensure the risk is minimal.

Pharmacology and Therapeutics: Pharmacology is the study of what the drug does to the body to produce its effect and what the body does to the drug to get rid of it. This course focuses on basic concepts of pharmacology and drugs acting on autonomic nervous system and drugs acting on gastrointestinal tract.

Pakistan Studies: This subject develops the vision of historical perspective, government, politics, contemporary Pakistan, ideological background of Pakistan. It deals with the study the process of governance, national development, issues arising in the modern age and posing challenges to Pakistan.

Islamiat: This course is designed to equip students with a comprehensive knowledge in the major areas of the Qur'an o Sunnah and Fiq e Islami, generally applied in Islamic disciplines. It offers students appropriate theoretical and practical methods of study, covering the classical and contemporary subject matters as well as issues related to modern sociological and scientific studies.

THIRD PROFESSIONAL

Dispensing Pharmacy: Dispensing Pharmacy play a significant role in the field of Pharmacy, Concerned with preparation and supply of medicines. It gives confidence to Pharmacist for his ability to take many decisions involved in Pharmaceutical Practice.

Pathology: This subject enables students to establish a liaison between Pharmacology and Clinical Practice. It deals with clinical and diagnostic aspects of disease and help student understanding underline mechanism and course of disease.

Pharmacognosy: It is based on the introduction and use of spectroscopic and chromatographic techniques for the identification of natural products. It also deals the chemistry and pharmacology of primary and secondary metabolites such as carbohydrate, alkaloids, glycosides, tannins, resins, fixed and volatile oils etc. from plants. The course also comprises the study of natural toxins, cosmaceutical and neutraceutical agents from nature. This course deals with the clinical aspects of herbs with respect to commonly used herbal drug such as Digitalis spp., Aloe vera, Nigella sativa, etc.

Pharmacology and Therapeutics: Pharmacology and Therapeutics comprising of drug related actions (Pharmacokinetics) to the therapy. The subject focuses on aspects of Neuro-Pharmacology, antimicrobial and immune modulators.

Computer & its Applications: It is related to basic knowledge about computer hardware and software, MS Office, internet and its usage, web designing etc.

Community Pharmacy: It deals with people in the community with certain responsibilities like drug compounding, patient counseling, drug dispensing and packaging of prescribed drugs to the patients with care

FOURTH PROFESSIONAL

Clinical Pharmacy: Clinical Pharmacy is a novel concept of practice based learning aimed at augmenting positive patient outcomes in health care settings.

Hospital Pharmacy: Hospital Pharmacy course define the direction of a professionally competent, legally qualified pharmacist and services for inpatients, out patients and ambulatory patients of hospital.

Pharmaceutical Industrial Pharmacy: This course deal with the different types of unit operations carried out in industries and safety operation to optimize the processing condition of different dosage forms manufacturing.

Pharmaceutical Quality Management: This course deals with the Quality operations including QM, QA, QC, GLP, GMP, validation aspects, also deals with the quality control aspects of various dosage forms including Biological testing as well.

Biopharmaceutics & Pharmacokinetics: Biopharmaceutics deals with the various formulation drugs physicochemical properties and physiological factors which influence the bioavailability of drugs pharmacokinetic discusses the lad me as a function or time and uses mathematical modeling to predict estimated course of drug movement in therapy.

FIFTH PROFESSIONAL

Pharmaceutical Technology: This course includes different Pharmaceutical Techniques used in industry for manufacturing different dosage forms i.e. modified release, immediate release and biotechnology.

Medicinal Chemistry: Medicinal chemistry brings synthesis, and development of Pharmaceutical drugs. Our work in the Department of Medicinal Chemistry encompasses the transformation of new chemical entities into potential therapies as well as the study of existing drugs, their Biological properties, and their quantitative structure-activity relationships. Medicinal chemistry is uniquely positioned to leverage recent scientific advance – in particular, the mapping of the human genome- into the discovery and development of novel drugs.

Clinical Pharmacy: Clinical Pharmacy is the area of pharmacy concerned with the science and practice of rational and evidence based medication use.

Forensic Pharmacy: This course comprises of the Laws and Rules & Regulations of Pharmacy Act and also discusses the restriction & penalties as per drug law.

Pharmaceutical Management & Marketing: The course of Pharmaceutical Management is designed to teach students the requisite skills needed to perform managerial functions in a community and institutional Pharmacy. It includes planning and integrating professional services, budgeting, inventory control and HR management topics. In Pharmaceutical Marketing, student will get to know about different aspects of Pharmaceutical Marketing and its application in professional field of Pharmacy.

EXAMINATION / ASSESMENT

ASSESSMENT METHODS

- Objective structured clinical.
- Practical examinations / practice skills
- Student log book or written reports are evaluated
- Group or individual presentations are evaluated
- Oral examinations
- Short answer written papers
- MCQ examinations

REGULAR SEMESTER EXAMINATION

It consist of the following;

• Continuous Assessment Tests:

Students are continuously assessed during semester by above methods. It is conducted by Examination Cell, Faculty of Pharmacy. This carries 40% weightage for each course.

• Final Semester Examination:

It is conducted by the Examination Department of Ziauddin University and held at the end of each semester. It carries 60% weightage of each course. Promotion to next higher class is based on passing all the courses (i.e. 100 % of the credit hour) scheduled for that year.

SEMESTER RESIT EXAMINATION

It is conducted by the Examination Department of Ziauddin University. Resit Examination of both the semesters will be held at the end of the academic year (after declaration of 2nd semester result). The weightage of

Continuous Assessment of any course **shall not be counted** towards **Resit Examination** and students must obtain minimum 50% marks to clear the course.

ELIGIBILITY FOR SEMESTER EXAMINATION

A cumulative attendance report of seventeen weeks (one semester) is displayed at the end of the semester. A student has to secure 80% attendance in each course (Theory & Lab.) to appear in the semester examination.

ELIGIBILITY FOR RESIT EXAMINATION

1. If a student fails in any of the courses in the semester, can appear in such course in the resit exam.
2. Students with 75% attendance will be eligible to appear in resit examination after submitting assignments to concern course incharge(s) (2 assignments per 5% shortage of attendance for each course).

REQUIREMENT FOR THE AWARD OF Pharm.D DEGREE

- A student must have passed all prescribed courses of Pharm.D degree.
- A student must have obtained a minimum 2.45 Cumulative Grade Point Ratio (CGPR).

GOLD MEDAL

At the time of convocation a Gold Medal, "Dr. Sir Ziauddin Gold Medal" is awarded by Ziauddin University to a student achieving highest CGPR but not less than 3.4 CGPR in Pharm.D.

ADMISSION POLICY

The program is open to all individuals who meet the selection criteria. All candidates are selected on merit according to the following criteria:

Examination / Interview	Weightage
Higher Secondary Certificate (Intermediate)	50%
Entry Test	30%
Interview	20%

Note: It is the responsibility of the applicant to submit the application according to instruction given with the application form.

FEE STRUCTURE

Prospectus and Application Form Fee	Rs. 2,000/-
Application Processing Fee	Rs. 2,000/-
Admission Fee (non refundable)	Rs. 50,000/-
Tuition Fee (Current Structure)	
Year 1	Rs. 125,000/- per annum
Year 2	Rs. 148,500/- per annum
Year 3	Rs. 150,000/- per annum
Year 4	Rs. 150,000/- per annum
Year 5	Rs. 135,000/- per annum

OTHERS CHARGES FOR APPLICATANS IN PKR

1- Security Deposit	Rs. 3,000 /-
2- Medical Examination Fee	Rs. 2,500 /-
3- Students' Activities	Rs. 2,000 /-
4- Graduation Fee	Rs. 3,000 /-
5- CD of Study Guide	Rs. 400 /-

- Semester Examination Fee will be charged separately.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The

University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

SCHOLARSHIPS

Scholarships are awarded to needy and meritorious students with a good GPA, conduct and not having undergone any Resit examination. It is awarded from 2nd Professional onwards.

CAREER OPPORTUNITIES AFTER COMPLETING Pharm.D

Pharmacy offers a challenging, satisfying and rewarding career to the individual whose interest lies in health services to the public, business, scientific research, university teaching and hospital practice. Pharmacists advise their patients, physicians, and other health practitioners on the selection, dosages, interactions, and side effects of medications, as well as monitor the health and progress of those patients to ensure that they are using their medications safely and effectively.

Areas, where pharmacists required, are:

- Hospital Pharmacy & Other Institutional Settings
- Clinical Pharmacy
- The Pharmaceutical Industry
- Community Pharmacy
- Retail Pharmacy
- Radio Pharmacy
- Pharmacy in Armed Forces
- Pharmacy law Practice
- Pharmaceutical Marketing
- Drug control administration
- Research & Development
- DRAP (Drug Regulatory Authority of Pakistan)

Many opportunities for pharmacist with Pharm.D degree are available in U.S.A, Canada, Australia & Middle East.



M.Phil & Ph.D PROGRAM

This program is designed to prepare students for teaching and research careers in academia, the pharmaceutical industry, hospitals and research institutes. Students are expected to select an area of specialization from one of the pharmaceutical science disciplines including Pharmacology, Pharmaceutical Chemistry, Pharmaceutics, Pharmacognosy and Pharmacy Practice. The M.Phil and Ph.D program consists of course work, presentations, research and publications. The objective of the program is to provide a thorough understanding of subject. In addition, students can choose from a variety of elective courses that allow them to gain knowledge and skills which may be used for a career of independent research and teaching in pharmacy for academic institutions, industrial laboratories, hospital or government research and administrative agencies. The University places emphasis on excellence in research, making every effort to ensure that students are able to commit as much time as possible to their research projects, which allows them to earn the M.Phil or Ph.D. degree in a timely fashion.

MISSION STATEMENT

"The mission of M.Phil/PhD program at Faculty of Pharmacy is to produce high caliber postgraduates with exceptional academic, research and leadership skills in basic, applied and professional disciplines of pharmaceutical sciences by providing them with high quality and competitive learning and research environment. This will enhance their knowledge, enlighten them to foster innovation and train them to meet their respective intra-disciplinary as well as cross-disciplinary challenges on the frontiers of pharmaceutical sciences."

DISCIPLINES OFFERED

M.Phil

- Pharmacology
- Pharmacy Practice
- Pharmaceutical Chemistry
- Pharmaceutics
- Pharmacognosy

Ph.D

- Pharmacology
- Pharmacy Practice
- Pharmaceutics
- Pharmacognosy

LEARNING AND TEACHING STRATEGIES

- Course work in the respective field of specialization will enable students to comprehend central issues or problems in the field.
- Discussion on the sources of literature will enable students to develop the skills to select, read and survey the recent developments in any particular area of research.
- Assignments including term papers on various research topics to be prepared by students during the course work.
- Participation in the journal club on weekly basis.
- Presentations of research papers at journal club.
- Preparation and presentation of synopsis for the thesis.
- Carrying out research projects in participation with other students as a part of assignments.
- Leading undergraduate students in research as a project or getting them involve in their own research project.
- Presentations of posters in conferences and symposia.
- Presentations in symposia and conferences of research work.
- Writing research papers and publications in national and international journals.



SEMESTER SUMMARY

Pharmaceutics: The students will know at the advanced level the immunity, infection, virology, microbial control and antimicrobial agent. The application of Pharmacokinetics and Pharmaceutical Biotechnology in the field of Pharmacy. The advanced level of the physical & biological principles which apply to the design, development and evaluation of drug delivery system.

Pharmacognosy: The subject deals with the natural product's biosynthetic pathways in order to enhance the production of beneficial products from natural origin. It also includes the methods for separation and isolation of bioactive compounds as well as their analysis.

Pharmaceutical Chemistry: This course deals with the chemistry of medicines, drug designing and discovery, drug synthesis by different methods. It also deals with the method development for analysis of drugs and drug related compounds by using different modern instrument and technology.

Pharmacology: This subject deals with advance Pharmacokinetics and Pharmacodynamics knowledge of drugs, therapeutic study of cardiovascular system, therapeutic modalities to treat cancer and management of antimicrobial therapy, study of common toxicity syndromes and standard protocols and pharmacology of derived autacoids.

Pharmacy Practice: This subject deals with patient care that optimizes the use of medication and promotes health, disease prevention within the healthcare system and therapeutic use of medication. In broad sense serving and caring patients in a comprehensive manner concerned with treatment of disease and the action of remedial agents.

Pharmaceutical Biostatistics: This course focuses on practical areas of statistics applied to pharmacy and pharmaceutical sciences Sample and Population, Test of Hypothesis and significance, Test involving binomial and normal distribution, Student "t", "Z" and "F" distribution, Analysis of variance, Experimental Designs, Basic Principles, completely randomized (CR- designs), Randomized complete block designs, Latin square etc., Correlation/ regression Analysis, Introduction of SPSS.

Research Methodology & Clinical Trials: This course will develop the skills to select, read and survey the recent developments in any particular area of research. It helps the students know about various aspects of consideration while doing research because this course will cover the areas of the fundamental research.

Computer Application in Research: This course enables research scholars to analyze data and interpret the outputs of various software of research methodology. This also helps them to design research models and simulators.

EXAMINATION / ASSESSMENT FOR M.Phil

REGULAR SEMESTER EXAMINATION

It consists of the following;

- **Continuous Assessment:**
- There are 02 Continuous Assessment Tests (CATs) in each semester.
- CATs are conducted for regular/repeater/grade improving candidates.
- Candidate repeating or grade improving has to score fresh continuous assessment marks in the failed course(s) or the course(s) is / are being improved.
- Continuous Assessment consists of CAT – I & II, Presentations, Assignments and Class Performance with weightage of 40% will be conducted by Examination Cell of Faculty of Pharmacy.
- **Final Semester Examination:**
- It is conducted by Examination Department, Ziauddin University.
- Weightage of each semester examination will be 60% for each course.

SEMESTER RESIT EXAMINATION

- It is conducted by Examination Department, Ziauddin University.
- Resit examination of both the semesters will be held at the end of the academic year.
- The weightage of Continuous Assessment of any course shall not be counted towards Resit Examination.

MARKING SYSTEM / PASS LEVEL

- Each candidate will take 04 courses per semester.
- Each course of a semester carries 100 marks and 03 credit hours.
- The minimum passing marks of each course are 60%

ADMISSION POLICY

The program is open to all individuals who meet the selection criteria. All candidates are selected on merit according to the following criteria:

Examination / Interview	Weightage
Entry Test	50%
Interview	30%
Academic Record	20%

SELECTION CRITERIA**For M.Phil Program**

- The candidate should have passed Pharm.D / M.Pharm degree from any university recognized by HEC.
- Passed GAT – General, conducted by NTS with a minimum score of 50%.

For Ph. D Program

- M.Phil / MS in an area related to Pharmaceutical sciences with CGPA 3.00 or more out of 4.00 in the semester system.
- The candidate should have passed GAT – Subject test conducted by NTS recognized by HEC.

FEE STRUCTURE (M.Phil & Ph.D)

Admission Fee	Rs.25,000 /=
Tuition Fee (per semester)	Rs.40,000 /=
Examination Fee (for M.Phil) (at the end of course)	Rs. 50,000 /=
Examination Fee (for Ph.D) (at the end of course)	Rs. 70,000 /=

- Semester Examination Fee will be charged separately.

Note:

Ziauddin University sponsor candidates who are working as faculty member of Faculty of Pharmacy.

CAREER OPPORTUNITIES

- A postgraduate qualification can enhance the career and earning prospects, and sets apart from other students who only hold an undergraduate degree.
- Postgraduate studies will enable a student to operate effectively at a senior level and go on to successful careers in business, industry and academia.
- Postgraduate study can also equip a student with the knowledge and skills, anyone need to move into a different profession.
- It is the pathway to an academic career.

Areas where Postgraduate students can serve are;

- Hospital Pharmacy Services
- Clinical Pharmacy Practice including TDM
- Chain Pharmacies and rental outlets (special services)
- R&D sectors / firms involved in Drug Designing, Pharmaceutical Product Development and Medicine related researches like Clinical trials, Pharmacovigilance, Pharmacokinetics / Pharmacodynamics studies.
- Individual Entrepreneurs like consultants / advisors (Training / Workshops / Consultancy / Publishing etc)
- Pharmaceutical Industrial sector
- Regulatory Bodies / Authorities (Drug Regulatory Authority of Pakistan, MOH, Drug Control Administration)

IMPORTANT CONTACT NUMBERS

Telephone No: 021-35379207

Email: zcp@zu.edu.pk

LOCATE US

Faculty of Pharmacy (Campus – I) B-06 Building
Faculty of Pharmacy (Campus – II) Dr. Ziauddin Hospital Basement

FACULTY MEMBERS**PERMANENT FACULTY**

Prof. Dr. Ali Akbar Sial
B.Pharm. , M.Pharm., LL.B, Ph.D (KU),
CRT (Uni. of New South Wales, Australia), R.Ph.
Dean

DEPARTMENT OF PHARMACEUTICS

Dr. Farya Zafar
B. Pharm., M.Phil., Ph.D. (KU), R.Ph.
Associate Professor & HOD

Dr. Anwar Ejaz Beg
B.Sc. (Hons.) M.Sc. (K.U.) M.Phil., Ph.D. (Bath, UK), MPPS
Professor & Advisor to Chancellor

Rabia Bushra
B. Pharm., M. Phil. (K.U.), R.Ph.
Associate Professor

Dr. Huma Ali
B. Pharm., M.Phil., Ph.D. (KU), R.Ph.
Associate Professor

Zeb-Un-Nisa
B. Pharm. , M.Phil. (K.U) R.Ph.
Assistant Professor

Yousra Ali
B. Pharm. , M.Pharm. (K.U), R.Ph.
Assistant Professor

Mehwish Rizvi
B.Pharm. M.Pharm (K.U), R.Ph.
Assistant Professor

Farrukh Rafiq Ahmed
B Pharm. (K.U), MS (South Korea), R.Ph.
Assistant Professor

Shazia Alam
B. Pharm. , M.Pharm. (K.U), R.Ph.
Assistant Professor

Sidra Tanwir Alvi
B.Pharm. (K.U), R.Ph.
Lecturer

DEPARTMENT OF PHARMACOLOGY

Dr. Nusrat Bano
B. Pharm., M.Pharm., Ph.D. (KU), R.Ph.
Associate Professor & HOD

Dr. Zeeshan Feroz
B. Pharm., Ph.D. (KU), R.Ph.
Associate Professor

Dr. Muhammad Aslam
Pharm.D (F.U.U.S.T), M. Phil. (K.U), R.Ph.
Assistant Professor

Dr. Saba Ajaz Baloch
Pharm.D (S.U), R.Ph.
Senior Lecturer

Aisha Jabeen
B.Pharm. (H.U), MBA (B.U), R.Ph.
Senior Lecturer

Dr. Noor-ul-Ain
Pharm.D (Z.U), R.Ph.
Lecturer

Dr. Talha Bin Fayyaz
Pharm.D (ZU), R.Ph.
Lecturer

DEPARTMENT OF PHARMACOGNOSY

Dr. Huma Shareef
B. Pharm., Pharm.D, M.Phil., Ph.D. (KU), R.Ph.
Associate Professor & HOD

Dr. Mirza Tasawer Baig
Pharm.D, M.Phil. (F.U.U.S.T), R.Ph.
Assistant Professor

Leena Khalid
B.Pharm. (K.U), R.Ph.
Senior Lecturer

Dr. Saran Haroon
Pharm.D (ZU), R.Ph.
Senior Lecturer



DEPARTMENT OF PHARMACY PRACTICE

Shazia Adnan
B.Pharm. (K.U), M.S(U.K), R.Ph.
Assistant Professor & Incharge

Imran Ali
B. Pharm., M.Pharm. (K.U), R.Ph.
Assistant Professor

Maqsood Ahmed Khan
B. Pharm., M. Pharm. (K.U), MBA (PAF Kiet), R.Ph.
Assistant Professor

Dr. Arif Sabah
Pharm.D. (B.M.U.), M. Phil (B.M.U.), MBA (MAJU), R.Ph.
Assistant Professor

Dr. Atta Abbas Naqvi
Pharm.D (Z.U), M.S (U.K), C.C.R. (U.K), CRT (U.K),
CRT (USA), Pg.D, RSP (England), R.Ph.
Assistant Professor

Shehla Siddiqui
B.Sc. (Hons), M.Sc. (K.U)
Senior Lecturer

Dr. Raafia Yousuf
Pharm.D (J.U.W), M.S (U.K), R.Ph
Senior Lecturer

Dr. Sehrish Lakhani
Pharm.D (Z.U), R.Ph.
Lecturer

Dr. Ali Nasir
Pharm.D (Z.U), R.Ph.
Lecturer

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

Qurratul-Ain Leghari
B. Pharm., M.Pharm., (KU), R.Ph.
Assistant Professor & Incharge

Rabya Munawar
B. Pharm., M. Phil. (K.U.), R.Ph.
Assistant Professor

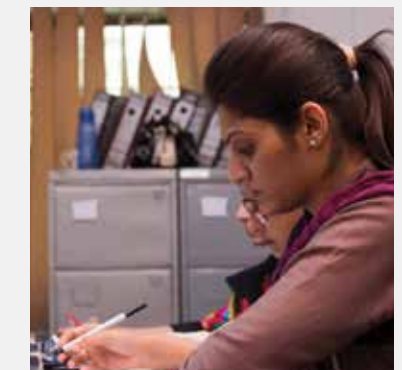
Dr. Huma Naseem
B. Pharm., M.Pharm., Ph.D. (KU), R.Ph.
Assistant Professor

Dr. Ahmed Shahid Mirza
B.Pharm. (H.U), Pharm.D (F.U.U.S.T), R.Ph.
Lecturer

Dr. Rasheeda Fatima
Pharm.D (Z.U), R.Ph.
Lecturer



ZIAUDDIN UNIVERSITY



COLLEGE OF NURSING



COLLEGE OF NURSING

I came to realize that it was the right place for me to start my Nursing career. Nursing is a busy field to get into. ZCN Faculty taught me to think critically while providing patient care and time management. The field of nursing is very challenging but I can honestly say that it enhanced my knowledge and skill which intern helped me to provide quality care to patients.

VICTORIA SAMAR
STUDENT MScN

INTRODUCTION

The Ziauddin College of Nursing earlier known as School of Nursing and was the first Academic unit of Ziauddin University. It was established and recognized by Pakistan Nursing Council in 1986. In 2009, the School of Nursing was upgraded to the level of College. From 2009, College of Nursing offers programs at undergraduate and graduate level to students coming from varied ethnic and socio-economic backgrounds of Pakistan. The reputation of Ziauddin College of Nursing has grown nationally and internationally owing to the competency, critical thinking and knowledge of the graduates.

MISSION

The Ziauddin College of Nursing is committed to the development of human capacities through the discovery and dissemination of knowledge, and application through service.

To advance this Mission, Ziauddin College of Nursing will:

- Provide high quality client care based on strong knowledge in practice through education, research, and advance knowledge.
- Benefit the university, profession and public through active individual and group involvement in service activities.
- Promote Physical and Social Sciences through excellence in teaching, education, research and public services.
- Prioritize teaching and research, which will inform and underpin intellectual innovation and change.
- Foster and develop leadership capacity through its education and research program.

- Engage in knowledge networking and emerging technologies related to nursing sciences.

AIMS

The Ziauddin College of Nursing aims to prepare nurses with advance knowledge, skills and attitude that are needed to practice efficient and skillful nursing. Hence upon graduation, students are able to demonstrate responsibility and accountability to the nursing profession by:

- Adhering to established patterns of professional practices, which support legal, religious and ethical tenant of Pakistan.
- Utilizing effective critical thinking and problem solving skills in caring for the individual, family and community.
- Utilizing scholarly skills and the use of scientific methods in critiquing and applying existing nursing theories and research findings in selected practice settings.
- Utilizing effective verbal and written communications in interpersonal and professional interactions with peers, patients, families and other professionals.
- Demonstrating excellent human resources for teaching, research, administration, management and leadership roles in nursing practice.
- Demonstrating a high degree of competence in the use of available resources to support the identified needs of communities, families and individuals.
- Developing leadership skills to promote development of the nursing profession.

EDUCATIONAL OBJECTIVES

- Maintain high quality programs of learning that prepare graduates to meet the health care needs of Hospital and the community we serve.
- Provide effective and efficient support for learning and teaching.
- Maintain effective systems of ongoing assessment and evaluation to assure high-quality programs.
- Engage in the discovery of knowledge through scholarly work, teaching and service to add to the body of nursing science.
- Provide for an effective research infrastructure to enhance faculty and student scholarship and research and other creative pursuits.
- Provide graduate nurses with the capability of pursuing higher education at institution of learning throughout the world.

NEW PROGRAMS

- Master of Science in Clinical Specialty (2 Years)
- Post RN BSN (2 Years)

PROGRAM OFFERED

Ziauddin College of Nursing currently offered the following programs:

DEGREE PROGRAMS

- Bachelor of Science in Nursing (4 Years)

DIPLOMA PROGRAMS

- Diploma in General Nursing (3 Years)
- Diploma in Pupil Midwifery (18 months)
- Diploma in Nurse Midwifery (1 Year)
- Licensed Practical Nurse (2 Years)

CERTIFICATE PROGRAM

- Paramedical Technician (1 Year)



MASTER OF SCIENCE IN CLINICAL SPECIALTY

This is a 2 Years degree Program. The goal is to prepare academicians and clinicians who will bring about change in nursing profession through education and quality patient care.

Specialty Areas:

1. Cardiology
2. Gynecology and Obstetrics
3. General Clinical (Medical & Surgical)
4. Pediatrics
5. Intensive Care Nursing
6. Oncology

ELEGIBILITY CRITERIA

Based on Pakistan Nursing Council regulation

FEE STRUCTURE

Admission Form	Rs.5,500/-
*Admission Fee	Rs.50,000/-
*Enrollment Fee	Rs.1,000/-
*Laboratory Charges	Rs.1,000/-
*Students Fund	Rs.5,000/-
*Academic Transport	Rs.4,000/-
*Examination Fee	Rs.6,000/-
*Security Deposit **	Rs.5,000/-

*Thesis Rs.30,000/-
 *Graduation Fee Rs.5,000/-
 Tuition Fee Year I (Per semester) Rs.50,000/-
 Tuition Fee Year II (Per semester) Rs.55,000/-
 (Each year consist of 2 semesters)
 *To be paid once at the time of admission.
 **Subject to change as needed

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

REQUIRED DOCUMENT

- 1 Copy of Matriculation/Intermediate certificate, Post RN BSN/BSN degree, Diploma in Midwifery or other Specialization certificate, Cumulative Transcript, domicile, CNIC, Parents/Guardian CNIC, Valid PNC license, Experience, 3 Reference Letters and letter of intent.
- NOC from concern department (if sponsored).
- 15 recent passport size photographs

POST RN BScN

This is a 2 years degree program. The purpose is to provide an opportunity to Diploma in nursing prepared nurses to gain in-depth knowledge, skills and develop professional independence, self-directedness and critical thinking.

*To be paid once at the time of admission.
 **Subject to change as needed

ELEGIBILITY CRITERIA

Based on Pakistan Nursing Council regulation
 Age: No age limit Gender: Both

FEE STRUCTURE

Admission Form	Rs.1,700/-
*Admission Fee	Rs.45,000/-
*Enrollment Fee	Rs.1,000/-
*Laboratory Charges	Rs.1,000/-
*Students Fund	Rs.3,000/-
*Academic Transport	Rs.4,000/-
*Examination Fee	Rs.6,000/-
*Security Deposit **	Rs.5,000/-
*Graduation Fee	Rs.5,000/-
Tuition Fee Year I (Per Month)	Rs. 6,000/-
Tuition Fee Year II (Per Month)	Rs. 6,500 /-

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

REQUIRED DOCUMENT

- 1 Copy of Matriculation/Intermediate certificate, Diploma in General Nursing, Diploma in Midwifery or other Specialization certificate, domicile, CNIC, Parents/Guardian CNIC, Valid PNC license and experience letters.
- NOC from concern department (if sponsored).
- 15 recent passport size photographs.



BACHELOR OF SCIENCE IN NURSING

This is a four years degree program, leading to eligibility for licensure as a BScN Nurse. The program equips students with knowledge, skills and attitude needed to practice nursing. It is designed to prepare clinical competent professional nurses. Upon completion of the program, nurses are able to utilize critical thinking in providing holistic care and uplift the image of nursing profession along with the development in nursing practice, education and research. The BScN student will be registered with PNC on the fulfillment of following conditions:

- BScN Student will be referred by College of Nursing for one year internship training certificate to hospital and hospital will award the certificate of completion of internship training.
- BScN Student will pass the Licensure exam and examination arrange by PNC.

ELEGIBILITY CRITERIA

Intermediate: 50% score (Pre-Medical group)

Age: 18-30 years Gender: Both

FEE STRUCTURE

Admission Form	Rs. 1,200/-
*Admission Fee	Rs. 45,000/-
*Enrollment Fee	Rs.2,000/-
*Laboratory Charges	Rs.2,500/-
*Students Fund	Rs.4,000/-
*Academic Transport	Rs.4,000/-

*Security Deposit **	Rs. 5,000/-
Tuition Fee Year I (Per Month)	Rs. 6,000/-
Tuition Fee Year II (Per Month)	Rs. 6,500 /-
Tuition Fee Year III (Per Month)	Rs. 7,000/-
Tuition Fee Year IV (Per Month)	Rs. 7,500/-

* To be paid once at the time of admission.

**Subject to change as needed

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

REQUIRED DOCUMENT

- 1 Copy of Intermediate Marks sheet/certificate verified by concern Board.
- 1 Copy of Intermediate Provisional certificate in case applicant has not received original Board's certificate, Intermediate Admit Card incase result is not announced, domicile, applicant CNIC (Above 18) / B. Form (Under 18) and Parents/Guardian CNIC.
- 15 recent passport size photographs



DIPLOMA IN GENERAL NURSING

This is a three years program, leading to a Diploma in General Nursing. The Diploma in General Nursing prepares students to deliver safe and competent nursing care to individuals, families and communities.

*To be paid once at the time of admission.

**Subject to change as needed

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

ELEGIBILITY CRITERIA

Matric : 55% score (Biology Science group) OR
Intermediate: 50% score (Pre-Medical group)

Age: 18-30 years Gender: Female

FEE STRUCTURE

Admission Form	Rs.1,000/-
*Admission Fee	Rs.25,000/-
*Laboratory Charges	Rs.2,000/-
*Students Fund	Rs.3,000/-
*Academic Transport	Rs.4,000/-
*Security Deposit **	Rs.5,000/-
Tuition Fee Year I (Per Month)	Rs.3,500/-
Tuition Fee Year II (Per Month)	Rs.4,000/-
Tuition Fee Year III (Per Month)	Rs.4,500/-

REQUIRED DOCUMENT

- 1 Copy of Matriculation Marks sheet/certificate verified by concern Board.
- 1 Copy of Matriculation Provisional certificate in case applicant has not received original Board's certificate, Matriculation Admit Card incase result is not announced, domicile, applicant CNIC (Above 18) / B. Form (Under 18) and Parents/Guardian CNIC.
- 15 recent passport size photographs.



DIPLOMA IN PUPIL MIDWIFE

This is an eighteen months program leading to a Diploma in Pupil Midwife. The goal of training this group of health care provider is to promote maternal and child health service in the country.

ELEGIBILITY CRITERIA

Matric: 45% score (Arts group)

Age: 18-40 years Gender: Female

FEE STRUCTURE

Admission Form	Rs.5,00/-
*Admission Fee	Rs.16,000/-
*Laboratory Charges	Rs.2,000/-
*Students Fund	Rs.2,000/-
*Academic Transport	Rs.4,000/-
*Security Deposit **	Rs.5,000/-
Tuition Fee Per months	Rs.3,500/-

*To be paid once at the time of admission.

**Subject to change as needed

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

REQUIRED DOCUMENT

- 1 Copy of Matriculation Marks sheet/certificate verified by concern Board.
- 1 Copy of Matriculation Provisional certificate in case applicant has not received original Board's certificate, Matriculation Admit Card in case result is not announced, domicile, applicant CNIC (Above 18) / B. Form (Under 18) and Parents/Guardian CNIC.
- 15 recent passport size photographs.

DIPLOMA IN NURSE MIDWIFERY

This is a one year Program, leading to a Diploma in Nurse Midwifery and for those candidates who have passed RN examination (Post basic). The aim of training is to reduce the high maternal mortality rates in the country.

ELEGIBILITY CRITERIA

Diploma in General Nursing
Age: 18-30 years Gender: Female

FEE STRUCTURE

Admission Form	Rs.7,00/-
*Admission Fee	Rs.6,000/-
*Students Fund	Rs.1,000/-
*Academic Transport	Rs.2,000/-
*Security Deposit **	Rs.2,500/-
Tuition Fee Per months	Rs.4,500/-

*To be paid once at the time of admission.

**Subject to change as needed

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

REQUIRED DOCUMENT

- 1 Copy of Matriculation Marks sheet/certificate verified by concern Board, diploma in Nursing, domicile, applicant CNIC (Above 18) / B. Form (Under 18) and Parents/Guardian CNIC.
- 15 recent passport size photographs.

LISCENSED PRACTICAL NURSE

This is a two years professional education diploma program, is being started for the first time in Pakistan at Ziauddin College of Nursing. This program offers integrated nursing knowledge, skills and professional attitude. Upon completion of this program the graduate is prepared to be a safe Clinical nurse, who will be able to provide comprehensive care at primary, secondary and tertiary levels with in hospitals and community settings.

**Subject to change as needed

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

ELEGIBILITY CRITERIA

Matric : 45% score (Science group) OR
Matric: 50% score (Arts group- for remote area only)
Age: 18-30 years Gender: Female

FEE STRUCTURE

Admission Form	Rs.5,00/-
*Admission Fee	Rs.7,000/-
*Security Deposit **	Rs.2,000/-
Tuition Fee Year I (Per Month)	Rs.2,000/-
Tuition Fee Year II (Per Month)	Rs.2,500/-

*To be paid once at the time of admission.

REQUIRED DOCUMENT

- 1 Copy of Matriculation Marks sheet/certificate verified by concern Board.
- 1 Copy of Matriculation Provisional certificate in case applicant has not received original Board's certificate, Matriculation Admit Card in case result is not announced, domicile, applicant CNIC (Above 18) / B. Form (Under 18) and Parents/Guardian CNIC
- 15 recent passport size photographs.



PARAMEDICAL TECHNICIAN

This is a one year certificate program leading to a Paramedical Technician in hospital. It is recognized by Sindh Medical Faculty. The aim of training is to prepare for basic nursing care to patient and management of hospital equipments. Monthly stipend will be given to every student and admission form fee is Rs.500/-.

ELIGIBILITY CRITERIA

Matric with 45% score (Biology Science group)
Age: 16-25 years Gender: Both

LEARNING AND TEACHING STRATEGIES

Various learning and teaching strategies are used at College of Nursing which includes: lecture with discussion, work in small group setting, review of articles, presentation (individual/pair), role-play, field visit, interactive lectures, problem solving exercises, small group sessions, readings, quizzes, self study, brain storming, paper writing, tutorials, computer based language learning and clinical.

STUDENT ASSESSMENT

CONTINUOUS ASSESSMENT

- Continuous assessment is conducted by the department of concern institution for regular and repeating candidate.
- Continuous assessment weighs 50% towards the overall marking whereas the other 50% will be evaluated by the University Examination Department.
- Some courses will be evaluated 100% internally by concerned institution (those mentioned in the curriculum).
- All clinical must be passed at a satisfactory level according to the components stated in the clinical evaluation form. Unsatisfactory performance can lead to learning contract.
- Student has to pass both the components (theory and clinical) before sitting into final university exam.

UNIVERSITY EXAMINATION

- It would be conducted by Ziauddin University Department of Examination for all degree programs.
- The University Examination will be held at the end of each semester/term of the academic year.
- Examination dates for the degree program will be announced by the Examination Department with the consultation of the Dean/principal of concerned institutions.
- Final examination weighs 50% towards the overall grading.

ADMISSION POLICY

ADMISSION TEST

Ziauddin University College of Nursing conducts an Admission Test for all eligible candidates. The test consists

REQUIRED DOCUMENT

- Original Matriculation marksheet/certificate, Medical fitness certificate from a qualified medical practitioner, Character certificate from Principal, and domicile.
- Original Matriculation Provisional certificate in case applicant has not received original Board's certificate
- 1 Copy applicant CNIC (Above 18) / B. Form (Under 18) and Parents/Guardian CNIC.
- 15 recent passport size photographs.

of Multiple Choice Questions and short question of various types.

MScN & Post RN BScN Program:

The test comprises of three sections designed to assess each candidate's performance in the areas of:

- Nursing Knowledge
- Mathematics & Logical Reasoning
- English

BScN, Diploma and Certificate Programs:

The test comprises of four sections designed to assess each candidate's performance in the areas of:

- English
- Science
- General Knowledge
- Mathematics

INTERVIEW

Short listed candidates will be interviewed to assess their suitability to complete concern course and pursue a career in nursing services. Interview will be held at the Ziauddin College of Nursing.

CANDIDATE SELECTION

Candidate selection in Ziauddin College of Nursing are strictly based on merit and candidates are considered on the basis of admission test and interview results. All eligible candidates will appear in the entrance exam and secure criteria set by the institute to enroll in the program.

SERVICE AGREEMENT

Students on service agreement at Ziauddin University & Hospital will be given monthly stipend. It is mandatory to complete a service agreement (bond) in Ziauddin University Hospital after being declared successful in final Year examination (requiring years of bond service depending on the program).

CAREER OPPORTUNITIES

The opportunities in the nurse careers are endless. After several years of experience, the nurse is eligible to pursue specialization of choice. This can often mean more opportunities in the nursing profession, including leadership, education or management.

ADMISSION INFORMATION

Admission form and necessary information can be collected from the Ziauddin College of Nursing Admission Cell between 8:30 am to 4:30 pm from Monday to Friday.
Phone #:36648237-9 Ext: 425
Fax #: (92 21) 36641469



FACULTY MEMBERS

Ms. Alia Nasir
MAEHPIN(UK), BScN, RN,RM
Principal

Mr.Sami Khokhar
Assistant Professor
MScN,BScN

Ms.Ghulam Fatima
Student Affairs Advisor
RN,RM,DWA,DTA

SENIOR INSTRUCTORS

Ms.Sofia Noreen Javed
Post RN BScN, RN,RM,DWA

Ms.Stella Naheed
Fast Track BScN, RN, RM,DWA,DTA

Ms.Sonia Joseph
Post RN BScN, RN,RM

Ms.Saba Arther
Post RN BScN, RN,RM

Ms.Rozina Jalaluddin
MScN, Post RN BScN, RN

Ms.Shireen Arif
Post RN BScN, RN

Ms.Zehra Rahim
Fast Track BScN, RN,RM

Ms.Rozina Amir Ali
Post RN BScN ,RN

Ms.Samina Sarduddin Jiwani
Post RN BScN, RN, RM

Mr.Adeel Eliyas
Post RN BScN , Diploma in cardiology, RN

Ms.Shamsa Hassan Ali
Post RN BScN,RN

Ms.Amber Hussain
Post RN BScN,RN

Ms.Bella Richard
Post RN BScN, RN, RM

Ms.Nudrat Lemuel
Post RN BScN ,RN

Ms.Anita Amin
Post RN BScN,RN

Ms.Navita Rahim
Post RN BScN, RN,RM

Ms.Mehwish Fazal (Non-Nursing)
Master's in Microbiology

Ms.Nousheen Faiz (Non-Nursing)
Msc in Physiology

Ms.Nasira Latif (Part Time)
Master in Psychology

Dr.Humera Noor (Part Time)
Bachelor of Eastern Medicine and Surgery

ASSISTANT SENIOR INSTRUCTOR

Ms.Nasreen Akhtar
Fast Track BScN,RN,RM, DWA,DTA

INSTRUCTORS

Ms.Aster Gulzer
Fast Track BScN,RN,RM

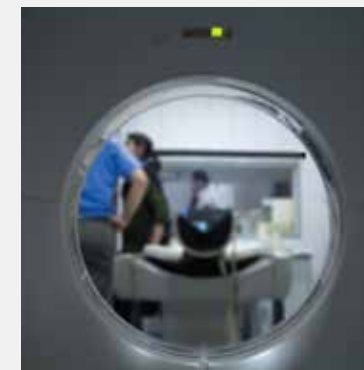
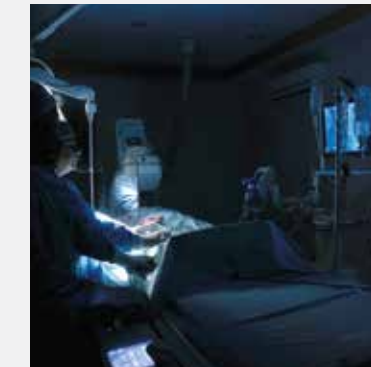
Ms.Urooj Aziz
RM,RN

Mr.Shehzad Jalaluddin
Bachelor of Electronic Engineering

SKILL LAB COORDINATOR

Ms.Nadia Ali
RN, RM

ZIAUDDIN UNIVERSITY



FACULTY OF ALLIED HEALTH SCIENCES



FACULTY OF ALLIED HEALTH SCIENCES

I chose medical technology (neuro sciences) as my course of study because I enjoy helping others attain their goals and live to their greatest ability. My wish after graduation was to be an influential health care provider in my community and my field. The program at Ziauddin University prepared me to become the type of medical technologist I envision myself to be. As a student I was provided with quality education and support from knowledgeable faculty & great staff, I have been well prepared for my career by people who care.. The encouragement to succeed on the spirit of competition which impels me to be the best have been instilled in me for a life time. The Department of Neurophysiology (now neurosciences) provides me an educational program that combines hands on experience and academics. The wealth of knowledge I gained gave a foundation which will secure my success.

HINA MUHAMMED MUNAF
GRADUATE 2014

INTRODUCTION

The Faculty of Allied Health Sciences, Department of Medical Technology initiated its Bachelors Degree Program (BSc) in 1998. Presently we have sixteen batches enrolled in BSc program. Keeping in view of global needs & student's requirement we initiated BS program in Medical technology which started in March 2014 & first batch will be graduated in 2018.

Our mission is to produce highly qualified and competent health professionals. The 4 year degree program will prepare the students for a new career in the field of medical technology. This program not only enhances the capabilities of student in the field of medical technology but also provide technical/ hands on experience. Presently there is a requirement of trained Medical technologist not over in local environment but also globally. BS program is the initiative of Ziauddin University to fill this vacuum.

We will draw on our diverse but complementary core competences in medical technology to meet existing and emerging health challenges in order to compete effectively in the globalized world. In all our activities, we shall uphold the highest level of professional ethics, fairness and honesty.

PROGRAM OFFERED

The objective of the BS program is to meet the educational need of medical technologist in the field of health care. This program will provide the students that is necessary to stay current with rapid changing technology and prepare them to assume positions of greater responsibilities.

The program is mostly directed towards the medical technologist to improve their qualifications not only in biomedical technology, quality assurance but also in interpersonal skills. The integration of these courses will provide the students with comprehensive knowledge to meet the educational needs of medical technologist in biotechnology & in primary & tertiary health care hospitals.

Following are the subspecialties of Medical technology program.

1. Radiological imaging
2. Cardiovascular Sciences
3. Nuclear medicine
4. Cardiac perfusion
5. Operation Theater Sciences
6. Radiation Therapy &
7. Neurosciences

LEARNING AND TEACHING STRATEGIES

The following teaching methods / strategies will be adopted for better understanding of Medical Technology students

1. Lectures & Tutorials
2. Hands on/ Clinical rotations
3. Interactive sessions (group discussions)

SEMESTER SUMMARY

RADIOLOGICAL IMAGING

A radiologic technologist uses his expertise and knowledge of patient handling, physics, anatomy, physiology, pathology and radiology to assess patients, develop optimal radiologic techniques and evaluate resulting radiographic images. They are expected to produce good quality X rays, CT scans as well as MRIs. It is the duty & responsibility of a technologist to assist radiologist in radiological procedures.

The curriculum substantially during their formal education, they must receive training on basic medical subjects like

medical terminologies human anatomy, physiology biochemistry, pharmacology and pathology.

In addition nuclear physics, mathematics, radiation physics, radiopharmacology biology, research, basics of nursing procedures, medical imaging sciences, radiologic instrumentation, emergency medical procedures, medical imaging techniques, computer programming, patient care and management, diet & nutrition & medical ethics will also be the part of the curriculum.

RADIATION THERAPY

The Radiation Therapist is an allied health professional who works in the field of radiation oncology. Radiation therapists use advanced computer systems to operate sophisticated radiation therapy equipment such as Linear Accelerators. The therapist works closely with the Radiation oncologists, Medical Physicists and other members of the health care team. They effectively design and assist the course of radiation treatment, in addition to managing the patient's well-being. His/her role is extremely important as the quality of the treatment is entirely depend on the competence

experience and the ability of the technologist. In BS curriculum the student will be able to learn fundamental like physics mathematics, human anatomy, physiology, computer skills, biochemistry other subjects include clinical oncology, patient care, radiobiology, radiation protection, radiotherapy simulation, research methodology, Patient care and management, diet & nutrition & medical ethics will be a part of curriculum and training.



CARDIOVACULAR SCIENCES

The main objective of the program is to provide students with a comprehensive background and understanding of integrative cardiac, vascular, renal and pulmonary biology. This objective will be accomplished by providing students with a wide variety of options to advance their education in the area with advanced didactic coursework familiarize the students to the use of general tools and methods of scientific research, deepen their basic training on the methods and technologies of principals cardiovascular provide, in each student.

In four year BS program the curriculum include basic medical subjects like medical terminologies human anatomy, physiology biochemistry, pharmacology. For cardiovascular sciences special subjects like ECG, Echocardiogram, Exercise tolerance tests echocardiography, Angiography, emergency treatments, research methodology, Patient care and management, diet & nutrition & medical ethics will also a part of the training

NEURO SCIENCES

The main objective is to make neurophysiology easily understandable. To make students in performing different neurophysiological procedures independently & confidently. To make the students familiar with neurophysiological labs which on later stage enhance the yield of neurophysiological procedures through their efforts & skills. After graduating in 4 years BS program in

neurosciences, which include not only basic medical sciences subjects but a technologist will be trained to perform all neurphysiological techniques like Electroencephalography (EEG) Evoked potential studies, electromyelography, nerve conduction studies, research methodology, Patient care and management, diet & nutrition & medical ethics will also a part of the training.

NUCLEAR MEDICINE

The profession of Nuclear Medicine Technology has experienced significant advancements in technology and molecular science. As the field has advanced, the scope of practice for nuclear medicine technologists has increased. The need for critical thinking and the ability to respond to clinical, organizational, and fiscal demands facing the health care industry supports the creation of a multi skilled technologist to perform nuclear medicine imaging studies and provide

assistance with radionuclide therapy treatments. Ziauddin University has taken the initiative to start four years BS program in nuclear medicine which not only include basic medical sciences subjects but special subjects like radiation physics, radiation hazard, nuclear cardiology, diagnostic imaging, emergency management research methodology, Patient care and management, diet & nutrition & medical ethics will also a part of the training.



CARDIAC PERFUSION

Cardiovascular Perfusion is a well-balanced academic and clinically based perfusion education program dedicated to safe, progressive patient care. The student is exposed to a rigorous education, which demands excellence in academic activities, clinical skills, research and professionalism. This program is designed to produce the perfusion technologist of the future. Upon completion

of the program, the student is awarded a Bachelor of Science (BS) in Cardiovascular Perfusion. The Curriculum not only include basic & special subjects but it also provide a knowledge in research methodology, Patient care and management, diet & nutrition & medical ethics also.

OPERATION THEATER SCIENCES

The main objective is to develop and structure learning objectives within the Operating theatre. Be able to facilitate learning by observation in the Operating theatre. Facilitate learning from allied healthcare professionals and the observation of teamwork. Develop procedures

to allow structured learning of practical skills and tasks. Build case-based experiential learning from operating theatre episodes, upon completion for four years which include theoretical classes and hands on training. Ziauddin university will award BS degree.

ASSESSMENT & EXAMINATION

The program has put an emphasis on continuous assessment of the student performance which carries 30% weightage include knowledge, Class tests / Assignment, presentations /group discussions & viva. Final examination carries 70% weightage.

Attendance should be minimum 75%. Any three late entries in the class counted as one absent.

Final examination is conducted by the Ziauddin University Department of Examination. The examination schedule is prerogative of the University; no changes would be made once the schedule is announced. Any query related to examination should be addressed to the Director Allied health sciences.

It is held at the end of 1st and 2nd semester of each academic year. Each course (Theory & Viva) of a semester carries 100 marks. The minimum passing marks of each course are 50% which shall be obtained by adding Continuous Assessment marks and Regular Semester Examination marks.

Students who have scored minimum of 50% in aggregate will be declared pass. Results of semester examination shall be announced by the controller examination Ziauddin University.

ADMISSION POLICY

BS Medical technology is a four year semester based program Admission announcement is once a year. Students with minimum 45% marks in premedical group or higher secondary certificates may apply. Candidates with O/A level must take equivalence.

All candidates are selected on merit basis according to the following criteria

- S.S.C marks

- H.S.C marks
 - Aptitude test
 - Interview marks
- Training sites/clinical rotations will be Ziauddin University Hospital North Nazimabad Campus, KDLB campus & Clifton campus

FEE POLICY

Prospectus & Application forms	Rs. 1,500/-
Application processing fee	Rs. 1,500/-
Admission fee (non refundable)	Rs. 8,000/-
Tuition fee (Current Structure)	
Year 1	Rs. 65,000/- per annum
Year 2	Rs. 65,000/- per annum
Year 3	Rs. 65,000/- per annum
Year 4	Rs. 65,000/- per annum
Student activity fee	Rs. 1,000/-
Security Deposit	Rs. 5,000/-

Student paying one year full tuition fee at the beginning of each academic year shall be entitled for a 5% rebate on tuition fee. Examination fee will be charged separately. Tuition fee will be collected on quarterly basis. 5% late fee will be charged after due date. International students contact the registrar office for details.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

FACULTY MEMBERS

A qualified teaching faculty is involved in teaching. Following are the faculty members of BS medical technology

Dr. Arif Hussain
Assistant Dean
Allied Health Sciences

Dr. Sarwat Faisal
Director
Allied Health Sciences

Ms. Mehwish Zeeshan
Assistant Professor & Program Coordinator
Allied Health Sciences

Prof. Dr.Sohail Maqbool
Head of the Department,
Radiological imaging

Dr. Javed Ansari
Head of the Department
Cardiovascular Sciences

Dr. Bashir A Soomro
Head of the Department,
Neurosciences

Dr. Nosheen Fatima
Head of the Department
Nuclear medicine

Dr. Yaha Khan
Head of the Department
Cardiac perfusion & Operation theater sciences

Mr. Aziz Siddique
Chief Medical physicist
Radiation Therapy

Dr. Muhammad Owais Ismail
Professor
Department of biochemistry

Dr. Syed Nudrat Nawaid Shah
Senior lecturer
Dept. of Anatomy

Ms Areeba Aghar
Lecturer
Department of Physiology

Ms. Saman Iftikhar
Head of the Department
Department of English

Mr. Abdur Rehman
Assistant Professor
Islamic studies

NUMBERS TO CONTACT

DIRECTOR ALLIED HEALTH SCIENCES

Dr. Sarwat Faisal
Tel # 021-36648237-9 (ext.436)

REGISTRAR ZIAUDDIN UNIVERSITY

Mr. Muhammad Yousaf
Tel # 021- 35862937

OFFICE ASSISTANT

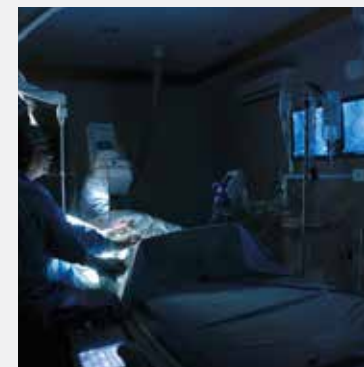
Mr. Faisal Rizvi
Tel # 021-36648237-9 (ext.436)

SEMESTER IN CHARGE & ASSISTANT PROFESSOR MEDICAL TECHNOLOGY

Ms. Mehwish Zeeshan
Tel # 021-36648237-9 (ext.436)



ZIAUDDIN UNIVERSITY



CLINICAL LAB SCIENCES



CLINICAL LAB SCIENCES

I am Rida Moin, Student of BS Medical technology Clinical Lab. Sciences third year. My past years at the campus are memorable academically indicative by my secured grade points of 3.37.

"I learnt a lot from the highly educated and kind teachers of the Clinical Laboratory Sciences Department. Faculty of Clinical Lab Sciences Ziauddin University works untiringly for the educational and skilled development of the students to get good results. Student and teacher relationship is symbiotic and the educational environment is very comfortable." Implementation of academics in Clinical Practicum is highly productive in helping me train like a professional. Presence of Clinical Laboratories in the same campus of university enhances the learning.

RIDA MOIN
BS MT CLINICAL LAB SCIENCES,
ZIAUDDIN UNIVERSITY

INTRODUCTION

Clinical Laboratory Scientists play vital roles in the detection, testing, diagnosing, and correct treatment of illness and disease. Technologists need to develop good analytical judgment and the ability to work under pressure. They in particular are expected to be good at problem solving.

Therefore, program and courses offered at Department of Clinical Laboratory Sciences puts great emphasis on students acquiring these skills by a combination of didactic sessions, group discussions, assignments, supervised practical training, competency assessment and Clinical Practicum. Graduates will learn to perform tests precisely with laboratory equipments, analyze and interpret the results.

WHAT'S NEW FOR 2015

Ziauddin University offers MS Medical Technology degrees in multiple specialties of Clinical Laboratory Sciences. These have been designed to set a new benchmark in clinical laboratory education in Pakistan and to meet the growing need for highly educated and well trained laboratory technologist. Courses offered will prepare the students toward supervisory academic, research and management positions in health care

settings. Following new postgraduate programs will be offered at Department of Clinical Lab. Sciences Ziauddin University.

MS – Medical Technology Blood Banking
MS – Medical Technology Chemical Pathology and Diagnostic Endocrinology
MS – Medical Technology Clinical Microbiology
MS – Medical Technology Hematology
MS – Medical Technology Clinical Laboratory Management (weekend Program)

PROGRAMS OFFERED

BS Medical Technology Clinical Laboratory Sciences 4 years
Associate Degree Medical Technology Clinical Laboratory Sciences 2 years
MS Medical Technology Clinical Laboratory Sciences 1 & 1/2 years
Diploma Phlebotomy 10 Months
Certificate Courses 18 Weeks
Diploma in Clinical Pathology (For MBBS Doctors) 2 years
Diploma in Transfusion Medicine (For MBBS Doctors) 2 years

BS MEDICAL TECHNOLOGY CLINICAL LABORATORY SCIENCES 4 YEARS

This 4 years BS degree prepares a student to take a job as a Clinical Laboratory Scientist (Technologist). Those who enjoy science and want to pursue a career in medical and health professions should consider entering the field of Clinical Laboratory Sciences. The degree qualifies successful graduates for many medical related occupations such as working in clinical laboratories and hospitals. Graduates will learn to perform tests precisely with laboratory equipments, analyze and interpret the results. Graduates may also work for a scientific equipment company, chemical or pharmaceutical company. Other career areas include working in research and in faculty positions.

ELECTIVES

BS Medical Technology Clinical Laboratory Sciences Degree conferment requirements are fulfilled when a student successfully completes:

A minimum of 134 credit hours.
An academic major.
Compulsory Clinical Practicum.
Minimum C.GPA of 2.00.

Note: The University retains the right to change educational policy and graduation requirements at any time. This may affect currently enrolled student's standing.

COURSE REQUIREMENT FOR COMPLETION OF BS DEGREE, FOR STUDENTS OTHER THAN FSc BIOLOGICAL SCIENCES

For students outside ZU: Minimum 35 credit hours required for entry into the Program.

COMPULSORY TRACK COURSES

In the 1st year of study i.e. (first two semesters) students have to pass the following track courses (34 Credit Hours):

17 CREDIT HOURS

Blood Donor Collection
Phlebotomy
Medical Terminology
Biostatistics and QC – I
Blood Banking – II

Chemical Pathology – I

17 CREDIT HOURS

Mathematics in Clinical Laboratories
Body Fluid Analysis
Bacteriology - II
Hematology – II
Blood Banking III
Histotechnology

In their 2nd and 3rd Year of study, the student will have to take the 5th to 8th semesters (65 Credit Hours) of the BS program.

Total Credit Hours: 35+34+65=134

***Students have to complete and pass all the required courses. They will not be awarded final transcript and degree, if they have not passed all the track courses. The students are required to pay for the tuition as well as examination fee for the courses.**

For students of ZU: Maximum 50 credit hours will be awarded for 2 years BSc under Annual System.

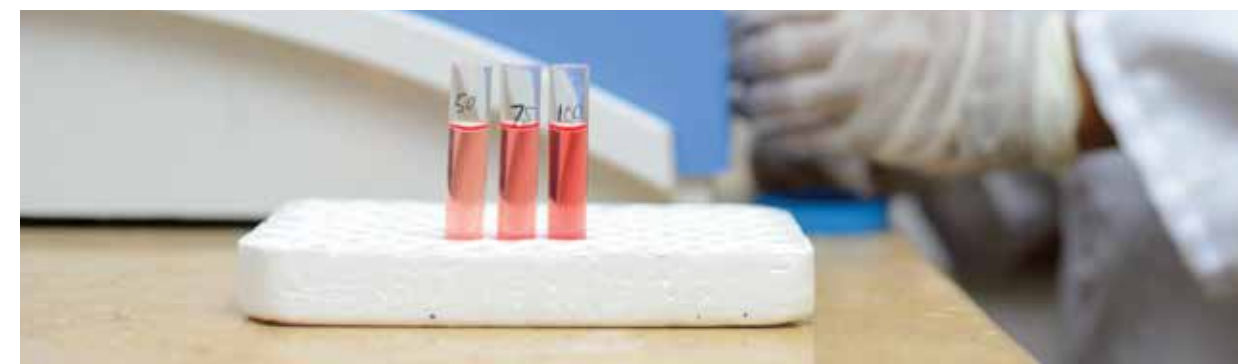
CREDIT HOURS OF THE BS PROGRAM

*2 Years Annual System BSc Medical Technology (ZU): In order to attain the requirement of 134 credit hours for BS degree, students have to attend the following courses in addition to the 5th – 8th semesters:

19 CREDIT HOURS

Bacteriology - I
Bacteriology - II
Blood Donor Collection
Professional Ethics & Behavior
English Language – II
Parasitology
Introduction to Computers
Body Fluid Analysis

Total Credit Hours: 50+19+65=134



LEARNING AND TEACHING STRATEGIES

Department of Clinical Lab science is unique in its existence having strong professionally developed curriculum fulfilling the present and futuristic needs of Clinical Laboratories. Department has state of the art air conditioned, multimedia equipped class rooms and state of the art teaching Laboratories further enhancing learning conducive environment for students. Another bright feature of Department of Clinical Laboratory Sciences is that Academic block and Clinical Laboratories Ziauddin Hospital are under the same roof which further reinforces

learning by implementing teaching examples in real time cases. In addition to the above mentioned facilities this department is having a great asset of qualified teachers and facilitators. Above mentioned features of the department are utilized to educate students theoretically and practically through lectures, group discussions, hands on practical sessions and finally at the end of academic semesters students are posted in Clinical Laboratories Ziauddin Hospital to implement knowledge and skills.



SEMESTER SUMMARY BS

1	English Language – I	2	Blood Donor Collection	1	Phlebotomy	3+1	17
	Basic Health Sciences-I	2	Basic Health Sciences-II	2+1	Med. Terminology	2	
	Professional Ethics & Behavior	1	Metabolic Chemistry	2	Phlebotomy & Donor Center Clinical Practicum	3wks 3wks	
2	English Language – II	3	Gen. Microbiology	2+1 Serology Practical	Blood Banking – I	2+1	17
	Mathematics for Clinical Laboratories	2	Parasitology	2+2 Stool D/R (+) Urine D/R			
	Pakistan Studies	1		Parasitology Clinical Practicum	2 wks		
	Islamiat	1					
3	Bacteriology – I	1+1	Blood Banking – II	2+2	Chemical Pathology-I	2+2	18
	Biostatistics and Q.C (I)	2					
4	Introduction to Computers	2	Hematology-I	2+2	Microbiology Clinical Practicum	2 wks	17
	Body Fluid Analysis	1+1	Bacteriology-II	2+2	Chemical Pathology–II	1+1	
	Hematology-II	1+2	Blood Banking - III	2+2	Histotechnology	1+1	
5	Communication Skills I	3	Blood Banking – IV	2+2	Chemical Pathology - III	2+1	16
	Hematology-III	1+2					
6	Molecular Biology	2+1	Clinical Immunology & Serology	2+1	Blood Bank & Chemical Pathology Clinical Practicum	10 days each	17
	Virology	1	Histotechnology	1+1			
	Communication Skills II	2	Basic Coagulation	1+2			
	Advance Mathematics for Clinical Laboratory	3					
7	Common Subjects	2	MAJOR SUBJECTS				16
	Clinical Laboratory Management		Hematology	12	Blood Bank	12	
	Laboratory Accreditation		Chemical Pathology	12	Microbiology Clinical Practicum (Major Subject)	8 Wks	
8	Common Subjects	2	MAJOR SUBJECTS				16
	• Biostatistics - II		Hematology	12	Blood Bank	12	
	Q.C in Clinical Laboratories (Advanced)		Chemical Pathology	12	Microbiology Clinical Practicum (Major Subject)	8 Wks	
GRAND TOTAL credit hours							134

STUDENT ASSESSMENT

Examination/Assessment Policy

Enrolled candidates would be assessed and examined for theory and skills with periodic examinations. The continuous assessment record would be monitored and will carry the weightage for final examination, which would be held at the end of each semester.

Weightage for the Final Result Written Examination

Continuous assessment 40% weightage
Attendance* 10% weightage
Final Exam 50% weightage

*Complete all Clinical Practicums satisfactorily.

Attendance

Attendance in classes is mandatory.

Attendance Grid

0.75% marks per 10% attendance until 80% , i.e., for every 10% attendance , 0.75% marks will be awarded in that course up till 80% attendance. For Example;

o For 80% attendance: 6 marks will be awarded
- For > 80% attendance, 2% marks per 10% attendance will be awarded in that course. For example;

o For 90% attendance: 8 marks
o For 100%: attendance: 10 marks

ADMISSION POLICY

- Intermediate (Premedical) / Medical Technology Laboratory Sciences with a minimum of 50% will require 4 years to complete BS.

- BSc Medical Technology (ZU)/Associate Degree (ZU) – will require 2 years to complete BS 5th – 8th semesters.

- BSc Medical Technology or 2 years diploma/Degree post- FSc (outside ZU) / BSc Biological Sciences (outside ZU) – will require 3 years to complete BS [3rd -8th semesters][35 credit hours required for entry into the Program).

FEE STRUCTURE

BS IN MEDICAL TECHNOLOGY
Prospectus, Application form

Rs. 1,500*

Processing fee Rs. 1,500*
Admission fee Rs. 15,000*

Tuition Fee (current structure)

Tuition Fee Year I Rs.65,000/-
Tuition Fee Year II Rs.65,000/-
Tuition Fee Year III Rs.65,000/-
Tuition Fee Year IV Rs.65,000/-

Student Activity fee Rs. 1000*
Laboratory Expenses Rs. 5000**

*Non-refundable, **Non-refundable, twice in whole program

Examination fee will be charged separately
2% of tuition fee per month will be charged as fine after the due date.

Need cum merit based scholarships are available.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

CAREER OPPORTUNITIES

- Clinical Laboratory Positions National and international.
- Diagnostic companies National and multinational.
- Pharmaceutical firms.
- Management positions.
- Academic Positions.
- Get a Medical Technology Clinical Lab. Sciences Degree to get foreign certifications like ASCP (American Society of clinical Pathologists).
- Get a Medical Technology Clinical Lab. Sciences Degree to increase your chances of immigration.

PROGRAM SWITCH - OVER POLICY of BS Candidates

Students who were initially enrolled for the 4 year BS degree have the chance of switch – over to the 2-year Associate Diploma on the provision of valid reason(s) accepted by the academic committee. This switch-over can be done in any semester after successful completion of 4th semester and compulsory Clinical Practicum for the Associate Degree program.

ASSOCIATE DEGREE IN MEDICAL TECHNOLOGY CLINICAL LABORATORY SCIENCES 2 YEARS

- 4 Semesters
- Summer and Fall Semesters. Each of 4 ½ months
- Total Duration: 2 Years 4 months.

ELECTIVES

Associate Degree Medical Technology Clinical Laboratory Sciences conferment requirements are fulfilled when a student successfully completes:

- A minimum of 69 credit hours
- Compulsory Clinical Practicum
- Minimum C.GPA of 2.00

Note: The University retains the right to change educational policy and graduation requirements at any time. This may affect currently enrolled student's standing.

LEARNING AND TEACHING STRATEGIES

Department of Clinical Lab science is unique in its

existence having strong professionally developed curriculum fulfilling the present and futuristic needs of Clinical Laboratories. Department has state of the art air conditioned, multimedia equipped class rooms and state of the art teaching Laboratories further enhancing learning conducive environment for students. Another bright feature of Department of Clinical Laboratory Sciences is that Academic block and Clinical Laboratories Ziauddin Hospital are under the same roof which further reinforces learning by implementing teaching examples in real time cases. In addition to the above mentioned facilities this department is having a great asset of qualified teachers and facilitators. Above mentioned features of the department are utilized to educate students theoretically and practically through lectures, group discussions, hands on practical sessions and finally at the end of academic semesters students are posted in Clinical Laboratories Ziauddin Hospital to implement knowledge and skills.

1	English Language – I	2	Blood Donor Collection	1	Phlebotomy	3+1	17
	Basic Health Sciences-I	2	Basic Health Sciences-II	2+1	Med. Terminology	2	
	Professional Ethics & Behaviour	1	Metabolic Chemistry	2	Phlebotomy & Donor Center Clinical Practicum	3wks 3wks	
2	English Language – II	3	Gen. Microbiology	2+1 Serology Practical	Blood Banking – I	2+1	17
	Mathematics for Clinical Laboratories	2	Parasitology	2+2 Stool D/R (+) Urine D/R			
	Pakistan Studies	1			Parasitology Clinical Practicum	2 wks	
	Islamiat	1					
3	Bacteriology – I	1+1	Blood Banking – II	2+2	Chemical Pathology-I	2+2	18
	Biostatistics and Q.C (I)	2					
	Introduction to Computers	2	Hematology-I	2+2	Microbiology Clinical Practicum	2 wks	
4	Body Fluid Analysis	1+1	Bacteriology-II	2+2	Chemical Pathology-II	1+1	17
	Hematology-II	1+2	Blood Banking - III	2+2	Histotechnology	1+1	
Clinical Practicum for 2 years Associate Degree students only–Total 4 months: Hematology 1 month Blood Bank 2weeks Chemical Pathology 2 weeks Microbiology 1 month Histotechnology 1month							GRAND TOTAL credit hours 69



STUDENT ASSESSMENT

EXAMINATION/ASSESSMENT POLICY

Enrolled candidates would be assessed and examined for theory and skills with periodic examinations. The continuous assessment record would be monitored and will carry the weightage for final examination, which would be held at the end of each semester.

WEIGHTAGE FOR THE FINAL RESULT WRITTEN EXAMINATION

- Continuous assessment	40% weightage
-Attendance*	10% weightage
-Final Exam	50% weightage

*Complete all Clinical Practicums satisfactorily.

ATTENDANCE

-Attendance in classes is mandatory.

ATTENDANCE GRID

-0.75% marks per 10% attendance until 80% , i.e., for every 10% attendance , 0.75% marks will be awarded in that course up till 80% attendance. For Example;

- o For 80% attendance: 6 marks will be awarded
- For > 80% attendance, 2% marks per 10% attendance will be awarded in that course. For example;
- o For 90% attendance: 8 marks
- o For 100%: attendance: 10 marks

ADMISSION POLICY

- Intermediate (Premedical) / Medical Technology Laboratory Sciences with a minimum of 50% will require 2 years to complete Associate degree program.

FEE STRUCTURE

ASSOCIATE DEGREE IN MEDICAL TECHNOLOGY

Prospectus, Application form	Rs. 1,500*
Processing fee	Rs. 1,500*
Admission fee	Rs. 9,000*
Tuition fee per semester (Rs. 60,000 per annum)	Rs. 30,000
Student Activity fee	Rs. 1000*
Laboratory Expenses	Rs. 5000**

*Non-refundable, **Non-refundable once in whole program

Examination fee will be charged separately
2% of tuition fee per month will be charged as fine after the due date.

Need cum merit based scholarships are available.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

PROGRAM SWITCH - OVER POLICY BS & ASSOCIATE DEGREE IN MEDICAL TECHNOLOGY

Those students who were initially enrolled for the 2 year Associate Degree will have the option for the switch – over to the 4-year BS program at the end of 4th semester. The students with 80% attendance and C.GPA of 2.00 in the previous 3 semesters can be transferred to the BS course after approval of the academic committee. Those students having a period of gap in their studies after 2 years of Associate Degree could be re-enrolled for the BS program within 5 years of graduation, on surrendering their Associate Degree. BS degree will not be awarded without submission of the Associate Degree to the Academic Committee or Registrar Office.

CAREER OPPORTUNITIES

- Clinical Laboratory Positions National and international.
- Diagnostic companies National and multinational.
- Pharmaceutical firms.
- Management positions.
- Academic Positions.
- Get a Medical Technology Clinical Lab. Sciences Degree to get foreign certifications like ASCP (American Society of Clinical Pathologists).
- Get a Medical Technology Clinical Lab. Sciences Degree to increase your chances of immigration.



MS IN MEDICAL TECHNOLOGY CLINICAL LABORATORY SCIENCES

The course of MS Medical Technology Clinical Laboratory Sciences is designed in such a way that it gives core knowledge of specific technology discipline understanding the requirement and need of Clinical Laboratories to function. This specialization will polish the candidate's clinical skills along with the opportunity for enhancing critical thinking, team work, leadership, develop a professional attitude and the ability to meet targets in short deadlines.

- Total 30 Credit hours as per HEC Criteria.

ELIGIBILITY FOR ADMISSION

- Candidates admitted to the MS- Medical Technology Clinical Laboratory Sciences shall be a graduate (16 years of education) from HEC recognized institute. OR
- Credit hours total at graduate level required for admission to MS =124 credit hours according to HEC.
- Track courses shall be required to pass by graduates, those who have not attempted that subject in their graduation or to complete graduation deficiency of credit hours if less than HEC recommendations.
- The candidates with some work experience in health care or with the medial/technical background will be given preference, at the time of admission.
- Admission test for MS Medical Technology programs will be conducted by Ziauddin University.

FEE STRUCTURE

Application Form, Prospectus & Processing fee
PKR 3000/- (Non Refundable)
Admission Fee
PKR 20,000/- (Non Refundable)
Laboratory Expenses
PKR 10,000/- (once in Whole Program)
Tuition Fee
PKR 50,000 / Semester
Track Course Fee PKR 8,000/Each Course*
Examination Fee
PKR 10,000/Semester
Examination Fee for Track Course
PKR 3,000/Each Course*

* Theory and Practical are separate courses.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

SPECIALIZATIONS AVAILABLE

- MS Medical Technology Clinical Laboratory Sciences Blood Banking
- MS Medical Technology Clinical Laboratory Sciences Hematology
- MS Medical Technology Clinical Laboratory Sciences Chemical Pathology
- MS Medical Technology Clinical Laboratory Sciences Clinical Microbiology
- MS Medical Technology Clinical Laboratory Sciences Clinical Laboratory Management (Weekend Program)

TEACHING STRATEGIES

Teaching strategy at postgraduate level is a combination of active and passive learning methodologies which include

- Mandatory completion of theory and practical course work
- Completion of assignments/tasks
- Mandatory Achievement of Clinical Laboratory Competencies
- Group Discussions
- Serving as Teacher's assistants

DURATION OF THE COURSE

- The Course shall extend over 1 ½ years under semester pattern with examinations at the end of each semester. The courses will be available for the candidate whenever offered by the university.
- One and Half years i.e. 18 Months, three academic semesters

DIPLOMA IN PHLEBOTOMY 10 MONTHS

Ziauddin University offers a 10 months diploma course in Phlebotomy. Phlebotomists are healthcare professionals responsible for the collection and handling of blood specimens used in diagnosing and tracking illnesses, or other health-related areas requiring a blood sample. The work involves:

- Explaining the procedure to patients and their parents, careers or relatives, if appropriate.
- Reassuring patients who may be distressed, in pain, or afraid of blood or needles.
- Taking the blood sample without harming the patient.
- Applying a clean dressing to the puncture wound.
- Labeling each sample tube with the patient's details.
- Delivering the blood and other samples to the appropriate laboratory within an agreed time limit.
- Filling in forms, data entry using a computer and re-ordering stock.

ELECTIVES

Total course duration - 10 months (40 weeks) with Academic Teaching of 4 months (16 weeks) followed by 5 ½ months Clinical Practicum

PROGRAM DETAILS

Academic Teaching: Total 4 months (16 weeks)

- Basic Health Sciences I
- General Phlebotomy
- Special Phlebotomy
- Medical Terminology
- Blood Donor Collection
- Functional English
- Basic Computer Skills
- Personal Grooming and Behaviour

Clinical Practicum: Total 5 ½ months (22 weeks)

- Reception - 2 weeks
- Phlebotomy 2.5 months

- Blood Donor Collection 2.5 months
- *During Clinical Practicum, students will be posted to morning, evening and night rotations to the assigned departments

Note: The University retains the right to change educational policy and graduation requirements at any time. This may affect currently enrolled student's standing.

Students have to complete and pass all the required courses. They will not be awarded final transcript and diploma certificate, if they have not passed all the track courses. The students are required to pay for the tuition as well as examination fee for the courses.

LEARNING AND TEACHING STRATEGIES

Department of Clinical Lab science is unique in its existence having strong professionally developed curriculum fulfilling the present and futuristic needs of Clinical Laboratories. Department has state of the art air conditioned, multimedia equipped class rooms and state of the art teaching Laboratories further enhancing learning conducive environment for students. Another bright feature of Department of Clinical Laboratory Sciences is that Academic block and Clinical Laboratories Ziauddin Hospital are under the same roof which further reinforces learning by implementing teaching examples in real time cases. In addition to the above mentioned facilities this department is having a great asset of qualified teachers and facilitators. Above mentioned features of the department are utilized to educate students theoretically and practically through lectures, group discussions, hands on practical sessions and finally at the end of academic semesters students are posted in Clinical Laboratories Ziauddin Hospital to implement knowledge and skills.

STUDENT ASSESSMENT

EXAMINATION/ASSESSMENT POLICY

Enrolled candidates would be assessed and examined for theory and skills with periodic examinations. The continuous assessment record would be monitored and will carry the weightage for final examination, which would be held at the end of each semester.

WEIGHTAGE FOR THE FINAL RESULT WRITTEN EXAMINATION

- Continuous assessment 40% weightage
 - Attendance* 10% weightage
 - Final Exam 50% weightage
- *Complete all Clinical Practicums satisfactorily.

ATTENDANCE

- Attendance in classes is mandatory.

ATTENDANCE GRID

- 0.75% marks per 10% attendance until 80% , i.e., for every 10% attendance , 0.75% marks will be awarded in that course up till 80% attendance. For Example;
 - o For 80% attendance: 6 marks will be awarded
- For > 80% attendance, 2% marks per 10% attendance will be awarded in that course. For example;
 - o For 90% attendance: 8 marks
 - o For 100%: attendance: 10 marks

ADMISSION POLICY

- Intermediate (Science/Arts/Commerce) / Medical

Technology Laboratory Sciences with a minimum of 50%.

FEE STRUCTURE

DIPLOMA IN PHLEBOTOMY

Prospectus, Application form	Rs. 1,500*
Processing fee	Rs. 1,500*
Admission fee	Rs. 9,000**
Tuition fee	Rs. 10,000
Student Activity fee	Rs. 1000
Laboratory Expenses	Rs. 5000**

*Non-refundable, **Non-refundable once in whole program

*Examination fee will be charged separately

* 2% of tuition fee per month will be charged as fine after the due date.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

CAREER OPPORTUNITIES

Trained health-care professionals in phlebotomy work as part of a clinical laboratory team in hospitals and Clinical Laboratories. Experienced phlebotomists may be promoted to the position of supervisors, senior phlebotomists, team leaders, phlebotomy trainers and phlebotomy managers or service managers.



CERTIFICATE COURSES IN MEDICAL TECHNOLOGY (18 WEEKS)

The courses offered in the Diploma, BS and MSc Degree Programs of Medical Technology, are now being offered as Individual "Certificate Courses" by the Ziauddin University, Department of Clinical Laboratory Sciences.

- 16 weeks of study and 2 weeks of examinations.
- Offered in Summer and Fall Semesters

ELECTIVES

These Certificate courses can help the graduate / post-graduate Medical Technology students to improve their credit hours in pursuit of higher studies. Paradigm shift from annual system to semester system has raised the importance of credit hours for further studies. As per HEC, students graduated from annual system can be granted maximum of 50 credit hours for BSc and 30 credit hours for MSc, making a total of 80 credit hours. However, eligibility requirement for M.Phil is 124 credit hours (as per HEC). Therefore, post-graduate students of Medical Technology from annual system lack 44 credit hours in pursuit of further studies, which can be compensated by these Certificate Courses

LEARNING AND TEACHING STRATEGIES

Department of Clinical Lab science is unique in its existence having strong professionally developed curriculum fulfilling the present and futuristic needs of Clinical Laboratories. Department has state of the art conditioned, multimedia equipped class rooms and state of the art teaching Laboratories further enhancing learning conducive environment for students. Another bright feature of Department of Clinical Laboratory Sciences is that Academic block and Clinical Laboratories Ziauddin Hospital are under the same roof which further reinforces learning by implementing teaching examples in real time cases. In addition to the above mentioned facilities this department is having a great asset of qualified teachers and facilitators. Above mentioned features of the department are utilized to educate students theoretically and practically through lectures, group discussions, hands on practical sessions and finally at the end of academic semesters students are posted in Clinical Laboratories Ziauddin Hospital to implement knowledge and skills.

STUDENT ASSESSMENT

EXAMINATION/ASSESSMENT POLICY

Enrolled candidates would be assessed and examined for theory and skills with periodic examinations. The continuous assessment record would be monitored and will carry the weightage for final examination, which would be held at the end of each semester.

WEIGHTAGE FOR THE FINAL RESULT WRITTEN EXAMINATION

- Continuous assessment 40% weightage
- Attendance* 10% weightage

- Final Exam 50% weightage
- *Complete all Clinical Practicums satisfactorily.

ATTENDANCE

- Attendance in classes is mandatory.

ATTENDANCE GRID

- 0.75% marks per 10% attendance until 80% , i.e., for every 10% attendance , 0.75% marks will be awarded in that course up till 80% attendance. For Example;
 - o For 80% attendance: 6 marks will be awarded
 - o For > 80% attendance, 2% marks per 10% attendance will be awarded in that course. For example;
 - o For 90% attendance: 8 marks
 - o For 100%: attendance: 10 marks

ADMISSION POLICY

- FSc Pre-medical / BSc Biological Sciences with 3 years of lab experience.
- BSc Medical Technology.
- MSc Medical Technology.

FEE STRUCTURE

- Tuition fee of Rs. 8,000 will be charged for each Theory course.
- Tuition fee of Rs. 8,000 will be charged for each Practical course.
- One "Credit Hour" of theory course means teaching for at least 1 hour each week throughout the semester for 16 weeks i.e. 16 classes in 1 semester.
- One "Credit Hour" in laboratory or practical work would require lab practical training of 2 hours per week throughout the semester i.e. 32 hours in 1 semester.
- Admission / Registration fee: - One time charge. This will be of Rs. 6,000 for 5 years.

* The Student will have to take these courses, whenever offered.

*Examination fee will be charged separately

* 2% of tuition fee per month will be charged as fine after the due date.

* Examination department will issue Course Certificate and a separate credit hour Transcript to the successful students.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

CAREER OPPORTUNITIES

These courses can be useful for working technologists, who lack professional degrees in ever-advancing field of Medical Technology. These individual courses will improve their educational qualification and technical skills, thereby helping them to attain better jobs.



DIPLOMA COURSES FOR MEDICAL DOCTORS

DIPLOMA IN TRANSFUSION MEDICINE (2 Years)

Diploma in Transfusion Medicine is a PMDC recognized distinctive program that focuses on the principles and practical skills necessary for effective organizational leadership in blood transfusion services. The focus is on critical thinking and problem-solving skills. The DTM program develops knowledge and skills that are critical for mid-and upper-level physician management positions in transfusion services. Students learn through case studies, class discussion exercise, projects and simulation. Students receive mentoring from a faculty experienced in blood bank and transfusion services. There is great emphasis on hands-on bench training along with teamwork and no emphasis on the passive absorption of knowledge. Students balance theoretical knowledge and practical skills in the Clinical Practicum programmes and learn to work independently.

PROGRAM DETAILS

Year I

- General Immunology
- Basic Coagulation
- Basic Hematology
- Basic Blood Banking
- Hemoglobinopathy Diagnosis
- Laboratory Hemostasis
- Laboratory Immunology and Serology
- Blood Group System
- Clinical Practicum
 - Donor Center
 - Blood Bank

Year II

- Immunohematology –I
- Quality Assurance in Immunohematology
- Apheresis
- Clinical Laboratory Management
- Immunohematology – II
- Clinics
 - Thalassemia Clinic
 - Hemophilia Clinic

* For all the courses, both theory as well as practical classes will be arranged.

CRITERIA FOR PROMOTION TO YEAR II AND AWARDING OF DIPLOMA

- Minimum 80% attendance.
- Acquire 90% of all skills.
- Submit all assignment on time.
- Pass all written and viva exam.

LEARNING AND TEACHING STRATEGIES

Department of Clinical Lab science is unique in its existence having strong professionally developed curriculum fulfilling the present and futuristic needs of

Clinical Laboratories. Department has state of the art air conditioned, multimedia equipped class rooms and state of the art teaching Laboratories further enhancing learning conducive environment for students. Another bright feature of Department of Clinical Laboratory Sciences is that Academic block and Clinical Laboratories Ziauddin Hospital are under the same roof which further reinforces learning by implementing teaching examples in real time cases. In addition to the above mentioned facilities this department is having a great asset of qualified teachers and facilitators. Above mentioned features of the department are utilized to educate students theoretically and practically through lectures, group discussions, hands on practical sessions and finally at the end of academic semesters students are posted in Clinical Laboratories Ziauddin Hospital to implement knowledge and skills.

STUDENT ASSESSMENT

EXAMINATION/ASSESSMENT POLICY

Enrolled candidates would be assessed and examined for theory and skills with periodic examinations. The continuous assessment record would be monitored and will carry the weightage for final examination, which would be held at the end of each semester.

WEIGHTAGE FOR THE FINAL RESULT WRITTEN EXAMINATION

- Continuous assessment 40% weightage
- Attendance* 10% weightage
- Final Exam 50% weightage

*Complete all Clinical Practicums satisfactorily.

ATTENDANCE

- Attendance in classes is mandatory.

ATTENDANCE GRID

- 0.75% marks per 10% attendance until 80% , i.e., for every 10% attendance , 0.75% marks will be awarded in that course up till 80% attendance. For Example;
 - o For 80% attendance: 6 marks will be awarded
- For > 80% attendance, 2% marks per 10% attendance will be awarded in that course. For example;
 - o For 90% attendance: 8 marks
 - o For 100%: attendance: 10 marks

ADMISSION POLICY

MBBS, One year House Job.

FEE STRUCTURE

DIPLOMA IN TRANSFUSION MEDICINE	
Prospectus, Application form	Rs. 1,500*
Processing fee	Rs. 1,500*
Admission fee	Rs. 10,000*
Tuition fee (per annum)	Rs. 60,000
Student Activity fee	Rs. 1000*

Laboratory Expenses Rs. 5000*

*Non-refundable, once in whole program

Examination fee will be charged separately

* 2% of tuition fee per month will be charged as fine after the due date.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

CAREER OPPORTUNITIES

- Health care professionals.
- Hospital management.
- Research positions.
- Academic positions.
- Leadership in transfusion positions.



DIPLOMA IN CLINICAL PATHOLOGY (2 Years)

Diploma in Clinical Pathology is a PMDC recognized distinctive program that focuses on the principles and practical skills necessary for effective organizational leadership in clinical laboratory services. The focus is on critical thinking and problem solving skills. The DCP program develops knowledge and skills that are critical for mid-and-upper level management position in clinical laboratories.

Students learn through case studies, class discussion exercise, projects and simulation. Students receive mentoring from a faculty experienced in blood bank and transfusion services. There is great emphasis on hands-on bench training along with teamwork and no emphasis on the passive absorption of knowledge. Students balance theoretical knowledge and practical skills in the Clinical Practicum programmes and learn to work independently.

ELECTIVES

Trainee would be trained as follows:

- Blood Banking 3 months.
- Chemical Pathology 7 months
(Two rotation of 4 and 3 months)
- Hematology 7 months
(Two rotation of 4 and 3 months)
- Microbiology 7 months
(Two rotation of 4 and 3 months)

* For all the courses, both theory as well as practical classes will be arranged.

CRITERIA FOR PROMOTION TO YEAR II AND AWARDING OF DIPLOMA

- Minimum 80% attendance.
- Acquire 90% of all skills.
- Submit all assignment on time.
- Pass all written and viva exam.

LEARNING AND TEACHING STRATEGIES

Department of Clinical Lab science is unique in its

existence having strong professionally developed curriculum fulfilling the present and futuristic needs of Clinical Laboratories. Department has state of the art air conditioned, multimedia equipped class rooms and state of the art teaching Laboratories further enhancing learning conducive environment for students. Another bright feature of Department of Clinical Laboratory Sciences is that Academic block and Clinical Laboratories Ziauddin Hospital are under the same roof which further reinforces learning by implementing teaching examples in real time cases. In addition to the above mentioned facilities this department is having a great asset of qualified teachers and facilitators. Above mentioned features of the department are utilized to educate students theoretically and practically through lectures, group discussions, hands on practical sessions and finally at the end of academic semesters students are posted in Clinical Laboratories Ziauddin Hospital to implement knowledge and skills.

STUDENT ASSESSMENT

EXAMINATION/ASSESSMENT POLICY

Enrolled candidates would be assessed and examined for theory and skills with periodic examinations. The continuous assessment record would be monitored and will carry the weightage for final examination, which would be held at the end of completion of Academic and practical training.

WEIGHTAGE FOR THE FINAL RESULT WRITTEN EXAMINATION

- Continuous assessment 40% weightage
 - Attendance* 10% weightage
 - Final Exam 50% weightage
- *Complete all Clinical Practicums satisfactorily.

ATTENDANCE

- Attendance in classes is mandatory.

ATTENDANCE GRID

- 0.75% marks per 10% attendance until 80% , i.e., for every 10% attendance , 0.75% marks will be awarded in that course up till 80% attendance. For Example;
- o For 80% attendance: 6 marks will be awarded
- For > 80% attendance, 2% marks per 10% attendance will be awarded in that course. For example;
- o For 90% attendance: 8 marks
- o For 100%: attendance: 10 marks

ADMISSION POLICY

MBBS, One year House Job.

FEE STRUCTURE

DIPLOMA IN TRANSFUSION MEDICINE	
Prospectus, Application form	Rs. 1,500*
Processing fee	Rs. 1,500*
Admission fee	Rs. 10,000*
Tuition fee (per annum)	Rs. 60,000
Student Activity fee	Rs. 1,000*
Laboratory Expenses	Rs. 5,000*

*Non-refundable, once in whole program

Examination fee will be charged separately

* 2% of tuition fee per month will be charged as fine after the due date.

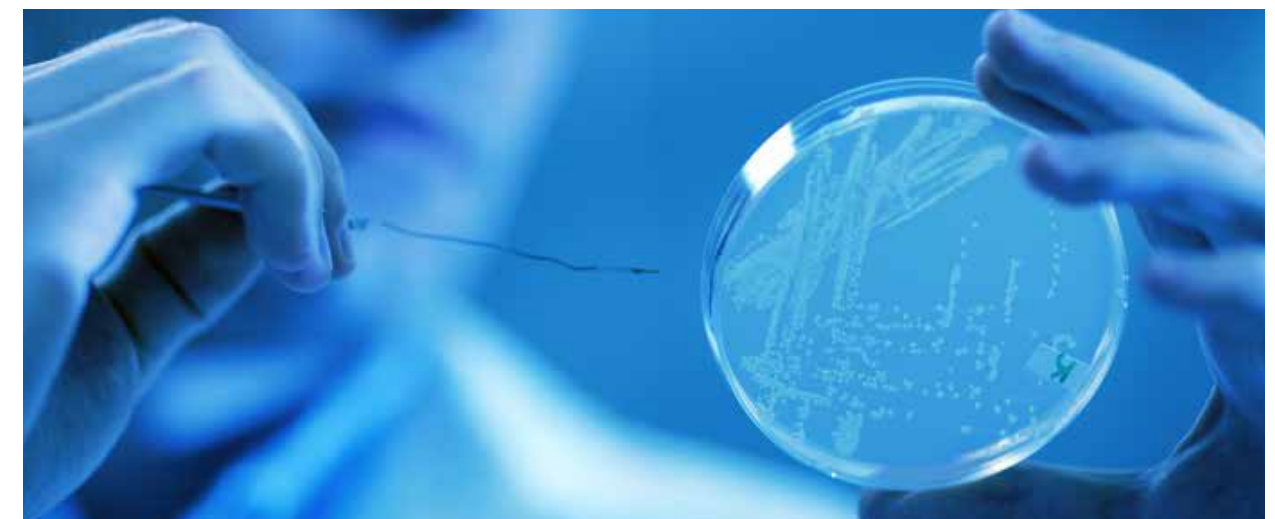
Need cum merit based scholarships are available.

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

CAREER OPPORTUNITIES

- Health care professionals.
- Hospital management.
- Research positions.
- Academic positions.
- Competent pathologist's positions.



FACULTY MEMBERS

CORE FACULTY

Dr. Arif Hussain
Assistant Dean
MBBS, DCP, M.Sc

Dr. Saba Jamal
Director
M.B.B.S
Diplomat American Board of Anatomic & Clinical Pathology
Diplomat American Board of Hematology

Dr. Ayesha Iqbal
Assistant Director
MBBS, MCPS (Clinical Pathology)

Ms. Humera Rashid
Manager Post-Graduate Program
BSc .Biological Sciences
BSc. Laboratory Medicine
MSc Clinical Microbiology

Ms. Saima Shiraz
Manager Under-Graduate Program
BSc. Laboratory Medicine
MSc Chemical Pathology & Diagnostic Endocrinology

SR. INSTRUCTORS

Ms. Rabia Majid
MSc Hematology and Blood Bank

INSTRUCTORS

Ms. Rabail Khan
BSc.(Hons.) Microbiology
MSc Microbiology

Ms. Asma Qadeer
BSc Microbiology
MSc Clinical Microbiology

DEPARTMENT OF CLINICAL MICROBIOLOGY

Professor Dr. Badar Jahan Farooqi
MBBS, D. Path, MSc, PhD. FCPS

Dr. Faisal Iqbal Afridi
Assistant Professor
MBBS, FCPS Microbiology

DEPARTMENT OF CHEMICAL PATHOLOGY

Dr. Adnan Mustafa Zubairi
Associate Professor
MBBS, FCPS Chemical Pathology

Dr. Ghazanfar Abbas
MBBS,FCPS Chemical Pathology

DEPARTMENT OF HEMATOLOGY

Dr. Fatima Meraj
Assistant Professor
MBBS, MCPS (Clinical Pathology)
FCPS Hematology

Dr. Zulqurnain Imran
MBBS, FCPS (Hematology)

DEPARTMENT OF HISTOPATHOLOGY

Dr. Fouzia Lateef
Assistant Professor
MBBS, MCPS (Clinical Pathology)
FCPS Histopathology

Dr. Aziz-un-Nisa
Assistant Professor
MBBS, FCPS Histopathology

DEPARTMENT OF BIOCHEMISTRY

Dr. Rizma Khan
Assistant Professor
PhD (Biochemistry)

DEPARTMENT OF ENGLISH

Ms. Saman Iftikhar
Head of Department
M.A in English
M.A in Linguistics

VISITING FACULTY OF DEPARTMENT OF CLINICAL LAB. SCIENCES

CHEMICAL PATHOLOGY

Dr. Erum Saleem
Dr. Usman Ali
Dr. Azra Moin

CLINICAL MICROBIOLOGY

Dr. Shazia Erum
Dr. Fareeha Adnan
Dr. Ali Shariq

HEMATOLOGY AND BLOOD BANKING

Dr. Noureen
Dr. Rohma
Dr. Filza Kashif
Dr. Maliha Sumbul
Dr. Neelam Mansoor
Dr. Farhan Ahmed
Dr. Omer Jawaid

HISTOPATHOLOGY

Dr. Shaista Anjum

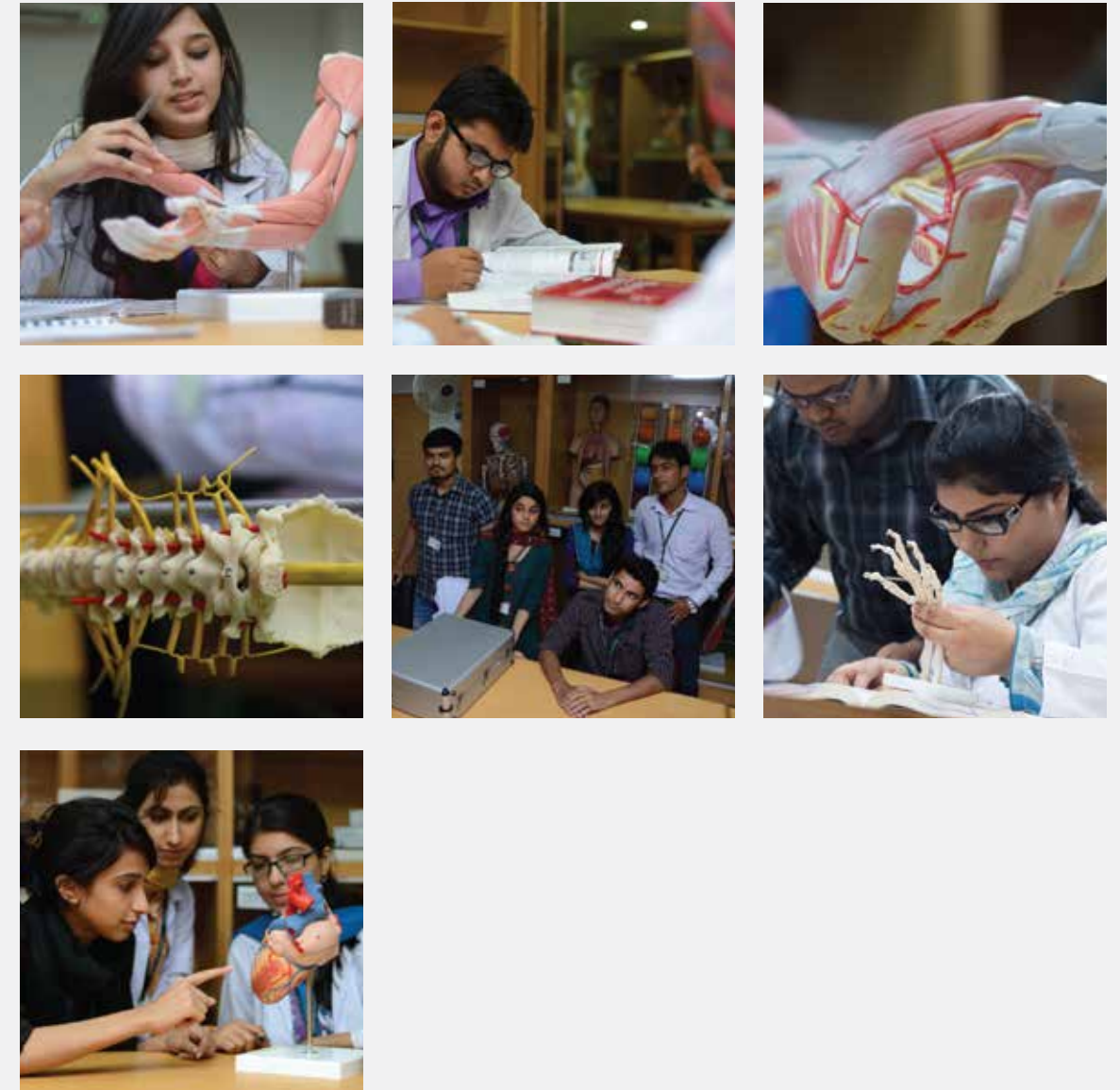
IMPORTANT CONTACT NUMBERS

Phone no. 021-36648237-9 Ext 406,389
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cls@zu.edu.pk

LOCATE US

Department of Clinical Laboratory Sciences
Oncology Building Basement 1
Ziauddin University
Block B North Nazimabad
Near Karimabad

ZIAUDDIN UNIVERSITY



COLLEGE OF PHYSICAL THERAPY



COLLEGE OF PHYSICAL THERAPY

Through the guidance of my facilitators, I am confident, self-assured, ambitious, and determined individual, perhaps ready to take on challenges at any level in my life. I reckon not only guidance, but an array of opportunities was provided by my institute that enabled me to explore ideas innovatively via research that eventually has enhanced my personality and knowledge; allowing me to excel in my career ahead. There is no doubt in my mind that I made the right choice in pursuing graduation degree from Ziauddin College of Physical Therapy.

M. SHAHEER ABBASI
BACHELOR IN PHYSICAL THERAPY
BATCH X, 2010
ZIAUDDIN COLLEGE OF PHYSICAL THERAPY

INTRODUCTION

Ziauddin College of Physical Therapy was established in year 1999 with the mission to produce competent physical therapist by providing quality education and inculcating the element of employability, leadership and responsibility with intent to improve patient care. The College offers graduate and postgraduate programs in physical therapy. Approximately 500 professionals have passed out till date & are working in all the major health care facilities in the country. ZCPT offers high quality teaching and innovative facilities of the study. Ziauddin College of Physical Therapy has both strong reputations nationally and internationally.

The course of Physical Therapy was upgraded from 4 years graduate program to 5 years, globally. In 2010 ZCPT upgraded its graduate program into a 5 years DPT and at present more 300 are in process of graduating in both

the graduate and executive programs; including 215 students of DPT (Doctor of Physical Therapy program. As a part of professional development program 2 executive courses (ADPT, PPDPT) are being offered to approximately 80 students. ZCPT is continuously upgrading the program and to increase the stature, the college has successfully launched the post graduate program and 6 candidates are enrolled in MS/MPhil program.

PROGRAMS OFFERED

- Doctor of Physical Therapy
- Post Professional Doctor of Physical Therapy
- Accelerated Doctor of Physical Therapy
- MS/MPhil in Physical Therapy



DOCTOR OF PHYSICAL THERAPY

Doctor of physical Therapy is a five years semester based degree program.

LEARNING AND TEACHING STRATEGIES

Both national and international qualified teaching faculty is involved in following of teaching to promote better understanding:

- Presentation/Assignment/Seminar
- Tutorials
- Skill based labs
- Projects
- Clinical Practice (Supervised/Independent)

CLINICAL TRAINING

Students of DPT of Ziauddin College of Physical Therapy have an exclusive advantage to be a part of an organization with large setup of tertiary care hospitals. The clinical training provides a better chance of learning and practicing the skills in the field hence, prepare future therapist to play an important role in the improvement of healthcare quality in society. Students of 3rd, 4th & 5th Professionals complete their clinical training in physical therapy at all three campuses of Dr. Ziauddin Hospital. In addition, Ziauddin College of Physical Therapy (ZCPT) started their clinical collaboration with other major healthcare institutions like Dow University of Health Sciences (DUHS), Al-Umeed Rehabilitation Center (AURA), Rabia Moon Rehabilitation institution.

SEMESTER SUMMARY

a. Basic Health Sciences

- Anatomy
- Physiology
- Biochemistry
- Pharmacology
- Pathology
- Movement Sciences
- Biomechanics
- Physics
- Manual Techniques

b. Clinical Sciences

- Medical Condition
- Surgical Condition
- Radiology & Imaging
- Emergency Procedures

c. Physical Rehabilitation Sciences

- Physical Agents and Electrotherapy
- Musculo-skeletal Rehabilitation
- Neurological Rehabilitation
- Integumentary Rehabilitation
- Cardiopulmonary Rehabilitation
- Geriatric Rehabilitation
- Pediatric Rehabilitation
- Sports Rehabilitation
- Women Health

d. Social Sciences and Research

- Sociology
- Human Growth & Development
- Research Methodology
- Ethics & Administration
- Bio-Statistics
- Research Synopsis & Project

STUDENT ASSESSMENT

EXAMINATION POLICY

- MCQs
- Short answer written examination
- Viva, OSPE/OSCE
- Group or individual presentation/assignments
- Student log books or written reports

Students are continuously assessed during semester by above methods. This carries 30% weightage for each course.

ADMISSION POLICY

Doctor of Physical Therapy is a five years semester based degree program which is open to all science stream (Pre-Medical) students with minimum 50% marks from an accredit Institution in Pakistan or equivalent to international standards. Therefore, candidates with O/A Levels must acquire equivalency before taking admission. All candidates are selected on merit, according to the following criteria:

- SSC Marks
- Entrance Test Marks
- HSC Marks
- Interview

FEE STRUCTURE

Fee Structure of DPT for First Year

Form Fee	Rs. 3,000/-
Admission Fee (will be paid once in 5 years)	Rs. 23,000/-
Student Fund (will be paid once in 5 years)	Rs. 2,000/-
Caution Money (will be paid once in 5 years)	Rs. 2,000/-

Tuition Fee (current structure)

Year 1	Rs. 150,000/- per annum
Year 2	Rs. 150,000/- per annum
Year 3	Rs. 150,000/- per annum
Year 4	Rs. 180,000/- per annum
Year 5	Rs. 180,000/- per annum

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

INTERNSHIP

One year of Physical Therapy Internship program is rewarded to selected students of Ziauddin College of Physical Therapy with the aim to provide clinical experience in different specialties of physical therapy under experienced supervisors. At the end of this program, certificates are awarded to those graduates who successfully complete the internship program.

CAREER OPPORTUNITIES

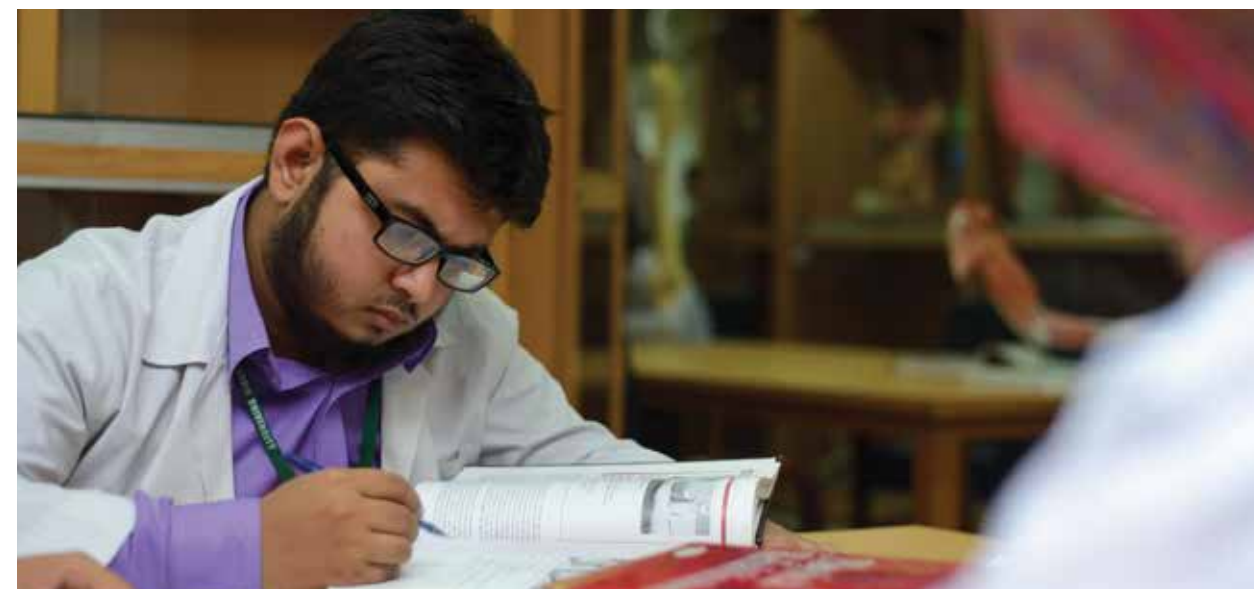
Doctor of Physical Therapy Program has opened the doors internationally as well as nationally, in different specialty areas. The incorporation of research and evidence based practice in the curriculum has opened the doors for autonomous practice.

IMPORTANT CONTACT NUMBER

Office Contact: 021-36648237-9 Extension: 529

LOCATE US

Ziauddin College of Physical Therapy (North Nazimabad Campus)
Plot #E/40/1/1 – Wahid Colony Block- B



POST PROFESSIONAL DOCTOR OF PHYSICAL THERAPY

LEARNING AND TEACHING STRATEGIES

Both national and international qualified teaching faculty is involved in following of teaching to promote better understanding:

- a. Presentation/Assignment/Seminar
- b. Tutorials
- c. Research Projects
- d. Article Review

SEMESTER SUMMARY

• Semester 1

- a. Exercise Physiology
- b. Anatomy
- c. Human Growth and Development
- d. Integumentary Rehabilitation
- e. Radiology and Imaging
- f. Foundation of Clinical Research

• Semester 2

- a. Health and Wellness
- b. Pharmacology
- c. Community Based Rehabilitation
- d. Evidence Based Practice
- e. Geriatric Rehabilitation
- f. Neuromuscular Rehabilitation – I

• Semester 3

- a. Cardiopulmonary Rehabilitation
- b. Sports Rehabilitation
- c. Women Health and Paediatric Rehabilitation
- d. Bioethics, Health Care Administration and Teaching Methodologies
- e. Ergonomics
- f. Neuromuscular Rehabilitation – II

• Semester 4

- Research Project

STUDENT ASSESSMENT

EXAMINATION POLICY

- a. MCQs
- b. Short Answer Question
- c. Viva

- d. Group or individual presentation/assignments

Students are continuously assessed during semester by above methods. This carries 30% weightage for each course.

ADMISSION POLICY

Post Professional Doctor of Physical Therapy is a two years semester based degree program which is open to all Bachelors of Physical Therapy students with minimum 50% marks from an accredit Institution in Pakistan or equivalent to international standards. All candidates are selected on merit, according to the following criteria:

- i. BSPT/BPT/equivalent
- ii. Interview

Fee Structure	
(** As per last year)	
Fee Structure of PPDPT for First Year	
Form & Prospectus Fee	Rs. 1,500/-
Processing Fee	RS. 1,500/-
Admission Fee	Rs. 15,000/-
Tuition Fee per Annum (Two Semesters)	Rs. 80,000/-
Total	97,000/-

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

IMPORTANT CONTACT NUMBER

Office Contact: 021-36648237-9 Extension: 529

LOCATE US

Ziauddin College of Physical Therapy (North Nazimabad Campus)
Plot #E/40/1/1 – Wahid Colony Block- B



ACCELERATED DOCTOR OF PHYSICAL THERAPY

Accelerated Doctor of Physical Therapy is one year semester based degree program for professional physical therapists, keen to upgrade degree for their professional growth.

LEARNING AND TEACHING STRATEGIES

Both national and international qualified teaching faculty is involved in following of teaching to promote better understanding:

- Presentation/Assignment/Seminar
- Tutorials
- Projects

SEMESTER SUMMARY

• Semester - I

- Anatomy
- Physiology
- Microbiology
- Introduction to Computers
- Evidence Based Clinical Decision Making
- Human Growth and Development / Behavioral Sciences
- Synopsis Submission

• Semester - II

- Emergency Procedures And Radiology
- Health and wellness / Ergonomics
- Peads / Women Health / Geriatric Rehabilitation
- Manual Therapy / Integumentary Rehabilitation
- Genetics
- Teaching Methodologies and Professional Practices
- Research Project

STUDENT ASSESSMENT

EXAMINATION POLICY

- MCQs
- Short answer written examination
- Viva

- Group or individual presentation/assignments

Students are continuously assessed during semester by above methods. This carries 30% weightage for each course.

ADMISSION POLICY

Open to all graduate physical therapy students with minimum 50% marks from an accredit Institution in Pakistan or equivalent to international standards. All candidates are selected on merit, according to the following criteria:

- BPT/BSPT/Equivalent
- Interview

FEE STRUCTURE

(** As per last year)

Fee Structure of ADPT for First Year	
Form & Prospectus Fee	Rs. 1,500/-
Processing Fee	RS. 1,500/-
Admission Fee	Rs. 20,000/-
Student Fund	Rs. 1,000/-
Caution Money	Rs. 2,000/-
Tuition Fee per Annum (Two Semesters)	Rs. 80,000/-
Total	105,000/-

CAREER OPPORTUNITIES

Professional physical therapist will be able to deliver evidence based physical therapy treatment and evolve with changes in health care system.

IMPORTANT CONTACT NUMBER

Office Contact: 021-36648237-9 Extension: 529

LOCATE US

Ziauddin College of Physical Therapy (North Nazimabad Campus)
Plot #E/40/1/1 – Wahid Colony Block- B



MS/MPHIL IN PHYSICAL THERAPY

ZCPT is aiming to create a dynamic research community, enabling physical therapist to fully equip themselves with the skills they require to excel in this filed through Higher Degree programs such as MS/MPHil

LEARNING AND TEACHING STRATEGIES

Both national and international qualified teaching faculty is involved in following of teaching to promote better understanding:

- Presentation/Assignment/Seminar
- Tutorials
- Skill based labs
- Projects
- Clinical Practice (Supervised/Independent)

SEMESTER SUMMARY

• Semester I

- Applied Biomechanics
- Research, Biostatistics and Critical Appraisal in Physical Therapy
- Neuromuscular Rehabilitation
- Exercise Physiology

• Semester II

- Cardiopulmonary Rehabilitation
- Women and Pediatric Rehabilitation
- Musculoskeletal Rehabilitation
- Teaching Professional and Scientific Practice

STUDENT ASSESSMENT

EXAMINATION POLICY

- MCQs
- Viva
- Short answer written examination
- Directly Observed Clinical Skills
- Group or individual presentation/assignments
- Semester Examination

Students are continuously assessed during semester by above methods. This carries 40% weightage for each course.



ADMISSION POLICY

All physical therapy graduates who has completed their 4 years BPT or 5 years of DPT or equivalent from an accredit Institution in Pakistan or equivalent to international standards. All candidates are selected on merit, fulfilling the following criteria:

- DPT/BPT/ or equivalent
- Interviews of short listed candidates
- GAT General (50% cumulative score)

FEE STRUCTURE

(** As per last year)

Fee Structure for First Year	
Form Fee & Processing Fee	Rs. 5,000/-
Admission Fee	Rs. 20,000 /-
Student Fund	Rs. 3,000/-
Caution Money	Rs. 2,000/-
Tuition Fee	Rs. 2,00,000/-
Final Examinations Fee	Rs. 25,000/-
Total	Rs. 2,55,000/-

CAREER OPPORTUNITIES

Physical Therapist develops in depth knowledge and research skills in an approved specific area in the field of Physical Therapy. It offers a challenging, satisfying, and rewarding career to the individual whose interest lies in health services to the public, business, scientific research, university teaching, and hospital practice. Physical therapist can practice independently at private clinics as well as job opportunities are available in tertiary and primary healthcare centers, NGOs, teaching and research institutions both nationally and internationally.

IMPORTANT CONTACT NUMBER

Office Contact: 021-36648237-9 Extension: 529

LOCATE US

Ziauddin College of Physical Therapy (North Nazimabad Campus)
Plot #E/40/1/1 – Wahid Colony Block- B

FACULTY MEMBERS

PERMANENT FACULTY

Ms. Sumaira Imran Farooqui
Principal, Associate Professor

Syed Abid Mehdi Kazmi
Associate Professor

Ms. Ghazala Noor Nizami
Assistant Professor

Ms. Amna Aamir Khan
Assistant Professor/MPhil Coordinator

Ms. Samreen Yasmeen
Assistant Professor

Mr. Shakeel Ahmed
Assistant Professor

Dr. Muhammad Usman Khan
Senior Lecturer

Ms. Jharna Devi
Senior Lecturer

Ms. Samreen Iqbal
Senior Lecturer

Ms. Maria Rahim
Senior Lecturer

Ms. Mahmooda Naqvi
Senior Lecturer

Ms. Sania Hassan Ali
Senior Lecturer

Ms. Samreen Athar
Senior Lecturer

Ms. Qurat-ul-Ain Adnan
Senior Lecturer

Ms. Nazish Rafique
Lecturer

Mr. Muhammad Khan Bugti
Lecturer

Mr. Ali Farhad
Lecturer

Ms. Sadaf Shafqat
Lecturer

Ms. Syeda Amool Sakeena
Lecturer

Mr. Kaleemullah Bin Babar
Lecturer

Mr. Muhammad Shahrukh
Lecturer

Dr. Muhammad Owais Ismail
Professor

Dr. Arsalan Manzoor Mughal
Asst. Professor

Dr. Syed Nudrat Nawaid Shah
Senior Lecturer

Ms. Areeba Qamar
Lecturer

Ms. Rabbab Jaffer
Lecturer

Dr. Ali Shariq
Senior Resident

Dr. Tazeen Arif
Senior Lecturer

Dr. Zaeem Arif
Lecturer

Dr. Bhatia Punnu
Registrar

VISITING FACULTY

Dr. Muhammad Akbar Mughal
Mr. Humayun Imran Azeemi

Ms. Saima Aziz
Dr. Salman Farooq

Mr. Ata Mohammad
Ms. Hina Asif

Mr. Syed Murtaza

Dr. Shehla Alvi

Dr. Sadaf

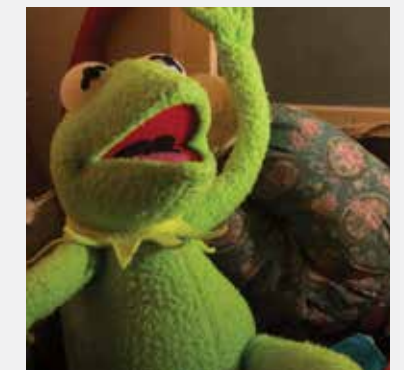
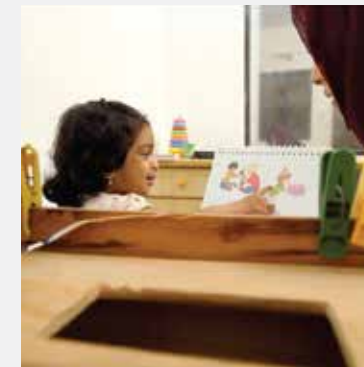
Dr. Faizan Ahmed

Eng. Ehtesham Aslam

Ms. Beenish Zafar

Dr. Ausaf Ahmed

ZIAUDDIN UNIVERSITY



COLLEGE OF SPEECH LANGUAGE & HEARING SCIENCES



COLLEGE OF SPEECH LANGUAGE & HEARING SCIENCES

My journey at CSLHS has been long and short at the same time. Long, because of all the coursework, the difficult readings and early-morning classes. Short, because of the lifelong friendships, the lasting memories, and the truly phenomenal things we learnt in the halls of Ziauddin.

Good or bad, long or short, I will always remember this place. While I'm thrilled to be writing this testimonial, I can't say I've spent as many hours as some of us have between these halls; but our professors and fellow students have always been around to guide and support us - that is dedication. That is what we need to find and never let go.

CSLHS has achieved distinction due to its experienced faculty. The intensive and competitive 4 year BS SLT program provides a broad spectrum of academic and professional growth that molds you into an expert to provide quality services to those afflicted with communication impairments.

My four years at CSLHS has prepared me very well for academe and I have been very successful in my employment at two of the Karachi's famous hospitals and at a private school. I wholeheartedly endorse CSLHS and everything for which it stands.

ROHMA N. AKHTAR
GOLD MEDALIST & VALEDICTORIAN - CLASS OF 2013

INTRODUCTION

Pakistan with a population of over 180 million individuals has an estimated over 20 million suffering from communication, swallowing and/or hearing disorders. To cater to this huge demand there are less than fifteen Speech Language Therapists/ Pathologists (SLTs/SLPs) in our metropolis, Karachi, qualified internationally and locally at the CSLHS. This was made possible because the Speech and Hearing Association of Pakistan (SHAP) and Ziauddin University (ZU) toiled collaboratively to establish the 'College of Speech Language & Hearing Sciences (CSLHS)' in order to launch our nation's first 4-year Bachelor's program in Speech Language Therapy in 2007.

The BS SLT program ambitiously aims to equip graduates to independently evaluate and treat speech, language, and swallowing disorders, conduct research and

contribute to the development of the profession, nationally and in the world at large. It cultivates critical thinking to analyze and act in response to contexts that shape policy and practice in the field of Speech Language Pathology. College of Speech Language & Hearing Sciences (CSLHS) is our country's foremost and only institute of its kind, established to equip Pakistani youth with an aspiring new career in Speech-Language Pathology, which has unlimited scope in Pakistan, and across the globe. In addition to this, CSLHS is also offering a diploma course in Childhood Development and psychopathology. Thus, CSLHS also aims to surmount the tremendous dearth of qualified Speech Language Therapists and the subsequent neglect of individuals suffering from communication, hearing and swallowing disorders. The Clinical Services offered at CSLHS are for the following:

Babies with

- Feeding and swallowing difficulties
- Mild, moderate or severe learning difficulties
- Language delay
- Specific language impairment
- Specific difficulties in producing sounds (Articulation & Phonological Disorders)
- Hearing Impairment
- Cleft Plate
- Stammering
- Autism/ Social interaction difficulties (PDD)
- Dyslexia
- Voice disorders
- Selective mutism
- Motor Speech Disorders (dysarthria, dypraxia)

Adults with

- Swallowing disorders (dysphagia)
- Language disorders (e.g. aphasia after stroke)
- Voice disorders (e.g. vocal fold nodules, VFparalysis, hoarseness)
- Cognitive language deficit due to Traumatic Brain Injury
- Cognitive Issues (attention, memory, awareness, Alzheimer's, degenerative diseases)
- Communication issues after Laryngectomy
- Physical disabilities
- Stammering (dysfluency)
- Motor Speech Disorders (dysarthria, apraxia)
- Right Hemisphere Syndrome
- Mental health issues
- Learning difficulties

WHAT'S NEW FOR 2015

Eight years after the commencement of the Speech Language Therapy Program, the CSLHS stands at the threshold of introducing yet another undergraduate program, a BS in Audiology. This program will provide students with an opportunity to work towards a career as an audiologist.

The field of Audiology deals with the non-medical management of the auditory and balance systems, and focuses on the study of normal and impaired hearing,

prevention of hearing loss, identification and assessment of hearing and balance problems and rehabilitation of persons with hearing and balance disorders.

PROGRAMS OFFERED:

BS in Speech Language Therapy (BS SLT) – a four year degree course
Diploma in Childhood Development & Psychopathology (DCDP) one year diploma



BS SPEECH AND LANGUAGE THERAPY

The field of Speech – Language Pathology remained neglected here, so far. Our students graduating from the college are the torch bearers of the profession in Pakistan and are able to provide their valuable services in a multitude of settings, working collaboratively with ENT specialists, neurologists, pediatricians, psychologists, occupational and physical therapists in hospitals, and rehabilitation units. They can also work at schools or have their private practices.

ELECTIVES

The CSLHS encourages students to acquire broad concepts, knowledge and skills beyond those gained through their specialist professional study. This is achieved through the requirement that all students complete at least one elective as part of their undergraduate program of study.

The MAKATON Language and Pakistan Sign Language (PSL) have been recommended as suitable electives by the college. Coursework is designed to provide students with essential, foundational Pakistani sign language skills, familiarity with deaf culture and an introduction to the discipline of education. It also equips the students to understand Alternative and Augmentative Communication strategies that are implemented with people who have a marked impediment in expressing themselves verbally.

LEARNING AND TEACHING STRATEGIES

Currently BS - SLT and the forthcoming BS-Audiology program, are both structured around a modular curriculum; they are both, knowledge and skill oriented. The curriculum emphasizes in – depth training both

theoretical and clinical; with clinical training (i.e. observation and performance of clinical work) within CSLHS, in the hospital, in special schools, and in mainstream schools.

Our College has many links within, as well as outside the University, to ensure specialized teaching of all courses that are comparable to those offered worldwide.

SEMESTER SUMMARY

BS SLT (and BS Audiology) is a 4 year long degree, consequently, having 8 semesters in each degree program. All courses have been grouped into modules, which constitute 42 courses of various duration. The core and associated courses are thoroughly integrated to ensure complete understanding of the field and its various disciplines.

The Modules are:

- Speech Pathology
- Language Pathology
- Audiology
- Biological and Medical Sciences
- Linguistics
- Psychology
- Information Technology
- Clinical Procedures
- Research Methodology
- Social Sciences

In the first-year of the speech language therapy program students have the same courses and classes since the fundamentals of both fields are the same. It is from second year that the programs divide and students go through courses specific to each program.



STUDENT ASSESSMENT

Each year has two semesters at the end of which there is a Semester Examination. The students' performance is also continuously assessed throughout the year. The

following table summarizes the assessment and the examination procedures:

Continuous Assessment (60% of the final grade)	Term Exam (40% of the final grade)
<ul style="list-style-type: none"> • Tests • Assignments • Presentations • Project 	<ul style="list-style-type: none"> • Written Examination • Practicum • VIVA

ADMISSION POLICY

Eligibility Criteria:

- Minimum requirement 'A' Levels / Intermediate students of all disciplines
- Minimum aggregate marks of 55%
- Fluency in written and spoken English.
- Pre-requisite for students from a non pre-medical background:

- o Biology in GCE O-Levels
- o Science in Matriculation (A '0' semester shall be held as a foundation course in Biological Sciences for applicants from a non pre-med background)
- Commitment towards a helping profession.

FEE STRUCTURE

- Prospectus and Application form 2,000/-
- Application Processing fee 2,000/-
- Admission fee 45,000/-
- Tuition fee (Current Structure)
- Year 1 Rs. 204,000/- per annum
- Year 2 Rs. 204,000/- per annum
- Year 3 Rs. 204,000/- per annum
- Year 4 Rs. 204,000/- per annum

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.) Examination Fee will be charged separately.

CAREER OPPORTUNITIES

The American news magazine selected "speech-language therapist/pathologist" as one of the "100 Best Jobs of 2013." Throughout the world speech and language therapists are actively engaged in research to enhance knowledge of the human communication

process. Speech and language therapist can work in a multitude of settings, such as hospitals, schools, clinics etc. They get an opportunity to work with full range of human communication and its disorders in individuals of all ages, from infants to the elderly.



DIPLOMA IN CHILDHOOD DEVELOPMENT AND PSYCHOPATHOLOGY

The CSLHS commenced a Diploma in Childhood Development and Psychopathology (DCDP), in August 2013. The program caters towards teachers, remedial and early childhood educationists, and parents who would want to enhance their knowledge in this area of early childhood development. DCDP follows a modular curriculum, which emphasizes on in – depth training, 7 modules covering human development from conception through Adolescence and Childhood Disorders are taught. In addition 16 hours of observations (practical component) at CSLHS recommended schools. Assistance is provided for the observation placement at the schools. This course examines the physical, cognitive and social development with diagnostic and intervention techniques for early childhood disorders.

LEARNING AND TEACHING STRATEGIES

The following teaching/learning methods/strategies are used to promote better understanding.V

- Lectures
- Case studies
- Small Group discussions
- Observation of children in mainstream and special schools shall be a mandatory component of the course.

SEMESTER SUMMARY

- The course comprises of two semesters.
- o 1st semester : August – December
 - o 2nd semester January - May

STUDENT ASSESSMENT

Examinations :

- Quizzes- 20% of final grade
- Assignments- 10% of final grade
- Mid Term Examination- 20% of final grade
- Viva- 10% of final grade
- Final Exam- 40% of final grade

ADMISSION POLICY

Intermediate / A level from all disciplines

FEE STRUCTURE

Application Fee	Rs. 2,000/-
Processing Fee	Rs. 2,000/-
Tuition Fee (Year 1)	Rs. 84,000/-

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

CAREER OPPORTUNITIES

The diploma program is framed to endow students with the foundation knowledge needed to work with children and adolescence that are identified with development delays and disorders.

The course is structured to provide students with a wide range of knowledge (both theoretical and practical) to improve screening and referral practices; thereby promoting early intervention.

After completion of the diploma, trainees can utilize their expertise in counseling and assessment of children behavior and help them to cope with their problems and grow into successful, well-adjusted adults.

IMPORTANT CONTACT NUMBERS

021-35148625
021- 35867937/ 0321-2080187
ayaz.siddiqui@zu.edu.pk
slt@zu.edu.pk

FACULTY MEMBERS

PERMANENT FACULTY

Ms. Amina Siddiqui
Principal
Assistant Professor
BSc – ASLT (University of Bombay, India)
Dip. Psych.
Dip. Children's Studies.

Mr. Shahid Ali
Senior Lecturer
Full-Time Faculty
MA Special Education (PGD- SLT)
MA ASLT
University of Karachi

Ms. Saamia Bilal Khan
Senior Lecturer
Part time Faculty
BS SLT, Ziauddin College of Speech Language Hearing Sciences
Ziauddin University

Ms. Anam Mazhar
Senior Lecturer
Full time Faculty
BS SLT, Ziauddin College of Speech Language Hearing Sciences

Ms. Rabab Sehr
Senior Lecturer
Full time Faculty
BS SLT, Ziauddin College of Speech Language Therapy
Ziauddin University

VISITING FACULTY

Dr. Mariam H. Syeda
Assistant Professor
MBBS (DOW), MS, CCC-SLP Northeastern University,
Boston, USA.

Ms. Amna Arfin
International Visiting Faculty,
Speech Language Pathology
BSc – SLT, University College, London (UK)

Ms Muniba Patel
International Visiting Faculty,
Speech Language Pathology
MA SLP, University of Houston, USA

Ms. Mahvash Akbarali Sait
International Visiting Faculty,
Speech Language Pathology
MA – Learning Disabilities, MA, CCC-SLP Northwestern
University, Chicago
USA

Ms. Misbah Qadeer
Senior Lecturer
Full time Faculty
BS SLT, Ziauddin College of Speech Language Therapy
Ziauddin University

Ms. Ifrah Shah
Senior Lecturer
Full-Time Faculty
BS SLT, Ziauddin College of Speech Language Therapy
Ziauddin University

Ms Samina Masood Haider
Senior Lecturer
Part Time Faculty
MSc Clinical psychology
Baharia University

Ms. Areeba Qamar
Visiting Faculty
MSc Physiology, University of Karachi

Dr Bushra Shirazi
Associate Dean
Department of Ethics
From ZMC
FCPS, PGD (Biomedical Ethics) MBE (Bio Ethics)

Dr Khalid Mahidah
Asst. Professor ENT,
Medical SLP

Ms. Sabah Habib Fazil
International Visiting Faculty,
Speech Language Pathology
MA CCC-SLP Northwestern University, USA

Mr. Abdul Samad Mukati
International Visiting Faculty,
Speech Language Pathology
MA, CCC-SLP University of Florida, USA

Ms. Mahnaz Maqbool
International Visiting Faculty,
Speech Language Pathology
MA CCC- SLP, Boston, University, Boston, USA

Ms. Tasneem Parvaz,
International Visiting Faculty,
Speech Language Pathology
BS SLT Ziauddin University



Ms. Bismah Salman Dadabhoy
Senior Lecturer
BS SLT Ziauddin University

Ms. Tehmina Waqas
Visiting Faculty,
Psychology
MA Clinical Psychology, University of Karachi

Dr. Najam Ul Haq
Visiting faculty,
Audiology
MBBS (SMC), MS Clinical Audiology (Australia)

Dr. Abbas Hussain
Visiting Faculty,
Language Science and Linguistics
PhD – Linguistics
University of Karachi

Ms. Shahana Siddiqui
Visiting Faculty
English Language Development
Bachelor of Teaching - Elementary
Deakin University Victoria, Australia
Master of Education,
University of Melbourne, Australia

Ms Anika Khan
Visiting faculty,
Learning Disabilities
BA, MBE Bio Ethics

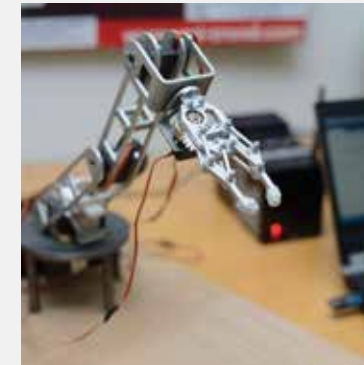
Dr Habiba Hasan
Visiting faculty,
Medical SLP
MBBS, DCH, MCPS

Dr Nargis Khan
Visiting Faculty,
Medical SLP
MBBS DCH

Dr Sadaf Shaheen
Visiting Faculty
Neurosciences for Speech Language Pathology
MBBS M Phil



ZIAUDDIN UNIVERSITY



COLLEGE OF BIO-MEDICAL ENGINEERING



BIOMEDICAL ENGINEERING

Having four years in Ziauddin University for graduation, I would be please to say it was a great choice that I had made. My decision to come to Ziauddin University was definitely the right one. Studying in the Ziauddin College of biomedical engineering has provided me with a myriad of new experiences and knowledge in field of biomedical engineering. The University facilities and helpful lecturers and supervisors have allowed me to gain the necessary knowledge to become a good professional engineer. There are plenty of useful academic studying skills being required and helpful techniques on project designing. The course was both challenging and rewarding. It was very practical and related theory to practice in a meaningful way which has encouraged continuous reflection, evaluation and improvement in my guidance practice.

And finally, the most important aspect of my graduate experience has gaining and sharing of knowledge between the students and teachers. The supervisors are always available to guide students and help them to achieve their goals. For this I would like to thank my teachers and project supervisors for their guidance and continuous help to achieve my goals.

NAZIA EJAZ
B.E IN BIOMEDICAL ENGINEERING, 2014

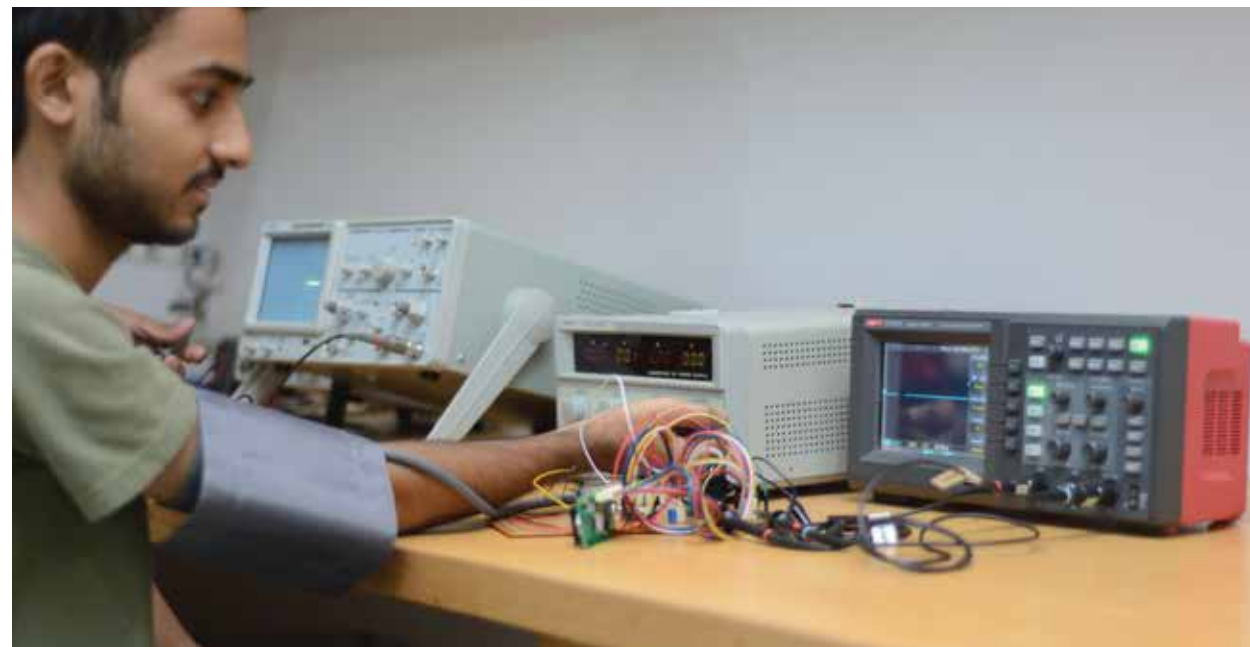
VISION

To excel state of the art product with analytical, design and computing skills that underpin modern engineering practices while encouraging the creativity and problem-solving trend.

and global market. Our endeavors are to make our students useful to society in particular and to humanity in general. While dealing with industry and utilities, attempts are made to maintain standards of integrity as well as quality.

MISSION

The college aim at producing engineers both for local



PROGRAM OVERVIEW

Biomedical Engineering is the application of engineering principles and techniques to the medical field. This field seeks the close the gap between engineering and medicine. It combines the design and problem solving skill of Engineering with Medical and Biological Sciences to improve Healthcare diagnosis and treatment.

Biomedical Engineering has only recently emerged as its own discipline, compared to many other engineering field; such an evolution is common as a few field transitions from being an inter-disciplinary specialization among already-established fields, to being considered a field in itself.

Much of the work in Biomedical Engineering consists of research and development, spanning a broad array of subfield. Prominent Biomedical Engineering application include the development of biocompatible prostheses, various diagnostic and therapeutic medical devices ranging from clinical equipment to micro-implants, common imaging equipment such as MRIs, CTs, Biopotentials and Biotechnologies for regenerative tissue growth in Pharmaceutical drugs and Biopharmaceutical.

BE Biomedical Engineering is a four-Year Degree Program. One will be taught and trained to be a Biomedical Engineer while learning engineering fundamental analysis, problem solving, design and teamwork with emphasis on application to biological systems, medical problems and their solution through Biomedical Engineering core courses.

Our broad and integrated curriculum includes courses from all engineering disciplines with hands on training through intensive laboratory course work and projects encompassing real-life biomedical problems.

WHY STUDY BIOMEDICAL ENGINEERING AT ZIAUDDIN COLLEGE?

If somebody have the passion to work for the sick and willing to make a difference in the field of healthcare. If somebody enjoys working with the team of physicians, scientists, researchers, medical technologist to improve, restore and develop functions to simulate human body and want to improve health related problems in country! Then, BIOMEDICAL ENGINEERING is looking for them... Although there are very small numbers of public and private sector universities in Pakistan that offer course in Biomedical Engineering but the span of Biomedical is

increasing gradually. Ziauddin University – a leading degree awarding private University has established a College of Biomedical Engineering with a view to provide education and train the Biomedical Engineers with the knowledge and skills necessary for successful careers as productive professionals, both in Pakistan and at the international level.

College of Biomedical Engineering is currently offering 4 year B.E in Biomedical Engineering and planning for 2 years Master Degree (M.E) in Biomedical Engineering. College of Biomedical Engineering is fully equipped with modern equipments and lead by dedicated faculty for the improvement of Biomedical Engineering status in the country and ultimately the health status by producing skilled human resource in the field of Healthcare. The graduates of this College are expected to become skilled engineers with leadership potential. They are taught and trained to be a skilled Biomedical Engineers and the syllabus enables the students to acquire the art and skills of probing, scientifically into health and related problems ultimately healthcare needs of the country. During 4 year study, students are exposed to a variety of learning strategies to provide experimental exposure through a multi-disciplinary approach to patient care, availing facilities in Ziauddin Hospitals.

PROFESSIONAL ACCREDITATION

PEC Accreditation status in process of completion.

AWARDS UPON GRADUATION

Graduate of 1st Batch Engr.Nazia Eijaz awarded Gold Medal.

WHAT'S NEW FOR 2015

MS Program in Biomedical Engineering.

PROGRAMS OFFERED

BS Biomedical Engineering (Four-Year Degree Program)

Electives:

- Rehabilitation Engineering
- Medical Informatics
- Biomedical Engineering System

Note: Electives are selected on the basis of availability of Qualified Faculty.

SEMESTER I			
S.No	Code	Course Title	Credit Hours
1	HS102	English-I (Functional)	2 + 0
2	NS100	Applied Physics	2 + 1
3	CE100	Introduction to Computing	2 + 1
4	NS 101	Applied Chemistry	2+1
5	EE100	Basic Electrical Engineering	2 + 1
6.	CE-101	Computer Aided Engineering Drawing	0+1
6	NS102	Basic Biology-I *	3 + 0*
		OR	
	NS102	Basic Mathematics-I *	3 + 0*
		Sub-total:	15

* Non Credit hours (CH)

SEMESTER II			
S.No	Code	Course Title	Credit Hours
1	NS103	Calculus and Analytical Geometry	3 + 0
2	HS201	English-II (Communication Skills)	2 + 0
3	BM100	Physiology - I	2 + 1
4	NS105	Biochemistry	2 + 1
5	BM102	Human Anatomy	2 + 1
6	NS103	Basic Biology-II *	3 + 0*
		OR	
	NS103	Basic Mathematic-II*	3 + 0*

* Non Credit hours (CH)

SEMESTER III			
S.No	Code	Course Title	Credit Hours
1	MS203	Biophysics	2 + 1
2	NS202	Linear Algebra & Differential Equation	3 + 0
3	EE202	Circuit Analysis	3 + 1
4	BM202	Basic Electronics	3 + 1
5	BM203	Physiology – II	2 + 1
6	HS 203	Islamic Studies	2 + 0
		Sub-total :	19

SEMESTER IV			
S.No	Code	Course Title	Credit Hours
1	BM205	Biomedical Electronics	3 + 1
2	NS204	Complex Variables & Transformation	3 + 0
3	HS202	Pakistan Studies	2 + 0
4	BM 206	Bio Fluid Mechanics	2 + 1
5	EE203	Digital Logic Design	2 + 1
6	BM204	Biomechanics	2 + 1
		Sub-total :	18

SEMESTER V			
S.No	Code	Course Title	Credit Hours
1	BM 307	Signals and Systems	3 + 1
2	EE204	Electromagnetism	2 + 0
3	NS 305	Probability & Statistics	2 + 0
4	CE302	Microprocessor and Interfacing	2 + 1
5	BM308	Biomedical Instrumentation-I	3 + 1
6	NS304	Numerical Analysis	3 + 0
		Sub-total:	18

INTERNSHIP (MANDATORY)**Objectives:**

Placing in Hospitals / Biomedical Equipment Supplying firms and Clinical Laboratories:

- To familiarize with the work environment in a medical concern.
- To gain technical knowledge, operation and application of various medical and laboratory equipments.

Ziauddin Hospitals at the following locations:

- 400 Bedded general Hospital at North Nazimabad.
- 150 Bedded general Hospital at Clifton.
- 150 Bedded general Hospital at Kemari.
- 50 Bedded Cancer Hospital at North
- 50 Dental Units at College of Dentistry at Clifton.

SEMESTER VI			
S.No	Code	Course Title	Credit Hours
1	HS305	Psychology	2 + 0
2	BM309	Bio-Signal Processing	2 + 1
3	BM310	Biomedical Instrumentation-II	3 + 1
4	BM311	Biomedical Control Systems	2 + 1
5	CE303	Modeling and Simulation	2+ 1
6	HS306	Economics & Healthcare Management	3 + 0
		Sub-total:	18

SEMESTER VII			
S.No	Code	Course Title	Credit Hours
1	HS407	English-III (Technical Writing & Presentation Skills)	3 + 0
2	HS408	Sociology	3+ 0
3	BM412	Biomaterials and Design	3 + 1
4	BM413	Elective I	2 + 1
5	BM415	Elective II	2 + 1
6	BM416	Project I	0 + 3
		Sub-total :	19

SEMESTER VIII			
S.No	Code	Course Title	Credit Hours
1	BM417	Neuroscience and Networks	3+ 1
2	BM418	Medical Imaging	2 + 1
3	MS401	Professional Practices	3 + 0
4	BM419	Elective –III	3 + 1
5	BM416	Project II	0 + 3
		Sub-total :	16
		Total Credit Hours	137

LIST OF ELECTIVE COURSES

- | | |
|--|--------------------------|
| 1. Rehabilitation Engineering | • Guided Design Projects |
| 2. Filters Design in Biomedical Engineering. | • Open Ended Labs |
| 3. Biophotonic Electronics | • Open Ended Quizzes |
| 4. Application of Microcontroller in Biomedical Engineering. | • Case Studies |
| 5. Artificial Intelligence | |
| 6. Robot and Control | |
| 7. Biomedical Engineering Systems | |
| 8. Bio-Sensors | |
| 9. Medical Informatics | |
| 10. Power Electronics | |

LEARNING AND TEACHING STRATEGIES

- Practical Examples
- Connecting Theory with Applications

SEMESTER SUMMARY

- Bioinformatics & Medical Informatics
- Structure and function of Biomaterials
- Biosensors and Bioinstrumentation
- Biomechanics and Rehabilitation Engineering
- Medical Imaging and Nanotechnology
- Neuroscience and Networks
- Biomedical Engineering Systems
- Final Year Project

FACULTY MEMBERS

STUDENT ASSESSMENT

Engineering Courses:

Mid Term	10%
Assignment/Project/Quizzes	10%
Lab Exam	20%
Final Exam	60%

Non-Engineering Courses:

Mid Term	10%
Assignment/Project/Quizzes	10%
Final Exam	80%

ELIGIBILITY CRITERIA

Minimum 60% marks in HSC (Pre-medical or Pre-Engineering Group) / A-Level or an equivalent qualification Diploma of Associate Engineering in Biomedical / Electrical / Electronic technology with 60% marks in the relevant discipline.

ADMISSION POLICY

SSC	10%
HSC	40%
Entry Test	40%
Interview	10%

FEES STRUCTURE

PAKISTANI STUDENTS

Prospectus & Form Fees	Rs. 1,500
Processing Fees	Rs. 1,500
Admission Fee (Only Once)	Rs. 20,000
Tuition Fee (Current Structure)	
Year 1 Rs. 110,000/- per annum	
Year 2 Rs. 110,000/- per annum	
Year 3 Rs. 110,000/- per annum	
Year 4 Rs. 110,000/- per annum	

Security Deposit (Refundable)	Rs. 6,000
FOREIGN STUDENTS	
Admission Fee (Only Once)	U.S. \$500
Tuition Fee (Per Annum)	U.S. \$2,500
Examination Fee (Per Annum)	U.S. \$ 200
Security Deposit (Refundable)	U.S. \$ 100

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

CAREER OPPORTUNITIES

- Biomedical Engineers in hospitals
- Medical equipment manufacturers
- Healthcare Management System (HMS)
- Research in academia, hospital and medical businesses
- Government health service agencies
- Development of new diagnostic instrumentation
- Implementing international electrical safety and hazards standards on medical devices
- Healthcare information system (e-Health) and e-Learning
- Pharmaceutical industries and academics

IMPORTANT CONTACT NUMBERS

+92-21-36644153, +92-21-36648237-9 EXT.334

LOCATE US

CITY CAMPUS
F-103, BLOCK B, NORTH NAZIMABAD KARACHI

REGULAR FACULTY

Prof. Dr. Muhammad Iqbal Bhatti
Principal, College of Biomedical Engineering
PhD (Telemedicine Systems), MS (Bio-Medical Engg),
M.Sc (Applied Physics), MBA, BE (Electrical Engg).
imiqbal@zu.edu.pk

Dr. Muhammad Zeeshan UI Haque
Associate Professor
PhD(Bioengineering), MS(Medical Electronics & Physics),
BS (Bio-Medical Engineering)
zeeshan.haque@zu.edu.pk

Dr. Kashif Ahmed Malick
Assistant Professor
M.D.(Dermatology), M.B.B.S(DOW)
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Engr. Afnan Qurban Shaikh (On leave)
Assistant Professor
MS (Bio-Medical Engg), BE (Bio-Medical Engg).
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Engr. Sidra Agha Syed
Assistant Professor
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Engr. Muhammad Saqib Eijaz
Assistant Professor
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Engr. Salman
Senior Lecturer
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salmanmarfatiya@zu.edu.pk

Engr. Mehwish Faiz
Senior Lecturer
ME (Comm. & Signal Processing), BS (Bio-Medical Engg).
mehwish.faiz@zu.edu.pk

Engr. Syed Ghufan Khalid
Senior Lecturer

VISITING FACULTY

Dr. Darakhshan
D. Pharm

Mr. Imran Khan
M.A English (Linguistic), M.A (Islamic Studies)

Mr. Arsalan Ahmed
MSc.(Applied Mathematics)

MS (Medical Engg.), BS (Biomed Engg.)
ghufan.khalid@zu.edu.pk

Engr. Hira Zahid
Lecturer
ME (Industrial Control & Automation),
BS (Bio-Medical Engg).
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Engr. Adnan Khan
Lecturer
BS (Bio-Medical Engg).
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Engr. Faraz Jawed
Lecturer
BE (Bio-Medical Engg).
faraz.jawed@zu.edu.pk

Engr. Yusra Ehsan
Lecturer
BE (Bio-Medical Engg).
yusra.ehsan@zu.edu.pk

Engr. Muhammad Rafay Sharif
Lab Engineer
BS(Bio-Medical Engg.)

Engr. Mubeen Yousuf
Lab Engineer
BE(Bio-Medical Engg.)

Engr. Ummamah Hamid
Lab Engineer
BS(Bio-Medical Engg.)

Engr. Nazia Eijaz
Lab Engineer
BS(Bio-Medical Engg.)

Engr. Muhaamd Ateeq
Lab Engineer
BS(Bio-Medical Engg.)

Engr. Hafiz Imtiaz Ahmed
BS (Bio-Medical Engg.)

Mr. Zahid Khan
MA (Pak. Studies)

Ms. Zehra Husain
M.Sc (Mathematics)



Engr. Syed Qamar Abbas Zaidi
B.E (Electrical) M.B.A.,L.L.M.

Ms. Sadia
M.Sc (Clinical Psychology)

Eng. Shahzad Naseem
ME (MSD), BS (Bio-Medical Engg.)

Mr. Absarullah Khan
MSc (Physiology)

ZIAUDDIN UNIVERSITY



FACULTY OF SOCIAL SCIENCES

FACULTY OF SOCIAL AND MANAGEMENT SCIENCES

INTRODUCTION

To understand the role of various forces at interplay in the complex society and the world at large affecting the life of the individual, his knowledge and understanding must be developed. This requires the study of Social Sciences promoting disciplinary and interdisciplinary thinking as well

as developing the skills of research and analysis to plan and pursue academic careers. The program being offered is designed to develop in students the theoretical, historical and experimental knowledge they need to interact in the environment they live in.

FACULTY MEMBERS

FACULTY

Prof. Dr. Tanweer Khalid
Dean
M.A. Political Science, University of Karachi
Ph.D. Political Science, University of Karachi
Diploma D' Associateship: Constitutional Law

DEPARTMENT OF ENGLISH

Ms. Saman Iftikhar
In-charge
M.A. Linguistics, University of Karachi
M. A., Literature, University of Karachi

Lecturer
Ms. Sharmeen Ismail
M.A. Linguistics, University of Karachi

Ms. Nadia Khan
M.A. Linguistics, University of Karachi

Ms. Barira Qadri
M.A. Linguistics, University of Karachi

Mr. Abdul Basit
M.A. Linguistics, University of Karachi

Pakistan Studies

Lecturer
Mr. Ghulam Muhammad
M.A. University of Karachi
MS/ Ph.D Islamic Studies, University of Karachi.

Mr. Mahboob Hassan Muqaddam
M.A. Political Science, University of Karachi

Islamiat

Abdur Rehman
Assistant Professor
MA in Islamic Studies, University of Karachi
MA in English Literature, University of Karachi

DEPARTMENT OF ENGLISH

Teaching of English is compulsory in most of the medical disciplines at Ziauddin University. The Department of English caters to these needs. Keeping in view the varying needs of different disciplines; the department has designed English Language, Communication Skills, Business English and Proposal Writing, Academic Reading & Writing Syllabi.

These syllabi will help students in reading and writing assignments related to medical topics. The courses will also help them in meeting other workplace related needs. Eclectic method of language teaching is adopted where the teachers use techniques and activities from a range of language teaching methodologies and approaches. Greater emphasis is given to learners' need to use English in order to communicate effectively in their professional fields.

The teachers focus on developing fluency as well as accuracy of English language among students. In both oral and written communication, the content relates to medical context so that the fluency and accuracy is acquired with ease.

Evaluation

Evaluation of students is based on a combination of continuous assessments and a final examination. In most programs the weightage given to each is 50%. Continuous assessments consist of regular class tests,

midterm test and home assignments. The purpose of continuous assessment is to keep the students focused on contents of the subject taught. The final result reflects round the year academic performance of the students. Evaluation of the teaching staff is also carried out. Towards the end of the program students are asked to complete a questionnaire to assess the performance of the subject instructor.

English courses are taught in the following programs:

1. *MSc in Blood Banking*
2. *MSc in Haematology*
3. *MSc in Microbiology*
4. *MSc in Chemical Pathology*
5. *MSc in Nursing*
6. *BSc in Medical Technology*
7. *BS in Medical Technology*
8. *BSc in Nursing*
9. *BS in Biomedical Engineering*
10. *Bachelor in Speech Language Therapy*
11. *Bachelor in Physical Therapy*
12. *Doctor of Physical Therapy*
13. *Diploma in Nursing*
14. *Diploma in Midwifery*
15. *Diploma in Phlebotomy*
16. *LPN*



ZIAUDDIN UNIVERSITY



INSTITUTE OF COMMUNICATION & MEDIA STUDIES



INSTITUTE OF COMMUNICATION & MEDIA STUDIES

My name is Anam Shahid, I'm currently a second year student in my third semester. My experience at ICMS has been an extraordinary one. While it is still a newly developed institute in a renowned university like Ziauddin, it has made its place astonishingly. I would call myself a newborn that has grown with skills that have been taught to me by an astounding faculty. My interest in media studies has even increased more than I started off with and now wish to explore this further more. I would find myself in no other place than ICMS, for this is a rollercoaster ride that is only headed to soar high!

ANAM SHAHID
ICMS

INTRODUCTION

The Institute of Communication and Media Studies at Ziauddin University is a response to growing demands for skilled media professionals, following rapid growth in media and adjunct industries in Pakistan. The Institute is structured around and deeply embedded in social philosophy. Embodying the spirit of sheer academics, combined with thorough professionalism, the program focuses to hone untapped talent. ICMS offers a promising future to all its graduates through carefully designed curriculum, delivered within purpose built, state of the art academic environment. The institute have the facility of 24 hour satellite TV channel and a radio station.

A well-defined plan for constant research engagement along with availability of live auxiliary media outlets provides students ample opportunities to gain knowledge and skills. All courses are designed to assist students to become more ethical, effective communicators in all contexts; interpersonal, public and mass communication. ICMS graduates also become more critical and analytical communication and media in all respects.

PROGRAMS OFFERED

The undergraduate BS program covers a variety of liberal arts and technically-oriented subjects covering theoretical, historical, analytical, critical, and performance approaches to communication processes and media. At the end of four years program, the graduates are equipped with necessary technical and professional orientation to qualify for jobs in business or institutions that desire effective communicators, as well as the background needed to pursue further education in communication or related fields.

The institute is conceived with a vision to bridge gap between academics and practice. The crux of ICMS program is parallel application, be it in print, radio, TV or new media and learning technologies. Given the kind of hands-on experience, ICMS is set to emerge as a premier communication, media and journalism institute in Pakistan.

LEARNING AND TEACHING STRATEGIES

ICMS focus on interactive learning to enhance the creative thought process, including class lectures, assignments, presentations, projects and quizzes.

STUDENT ASSESSMENT

The assessment for each course is divided into Term 1 & Term 2, Final term and course assessment consisting of assignments, presentations, projects, quizzes which constitute 100% marks for each course. The final term is conducted at the end of the semester while Term 1 & Term 2 along with other course assessments are done during the semester.

Grade	Percentage	Grade Point
A+	95-100	4.00
A	90-94	4.00
A-	85-89	3.67
B+	80-84	3.33
B	75-79	3.00
B-	70-74	2.67
C+	65-69	2.33
C	60-64	2.00 (Minimum Passing Grade)
F=Fail	59 & below	0.00

(2.2 will be an overall CGPA requirement of four years)

ADMISSION POLICY

- Minimum A-Levels 3 passes/Intermediate (55% marks, including first year no supplementary) or equivalent from a recognized institution.
- Merit will be decided upon basic admission criteria (point 1). ICMS entrance test score, group discussion and interview.

FEE STRUCTURE

FORM FEE

Rs. 1,500/-

APPLICATION PROCESING FEE FOR BS

Rs. 1,500/-

ADMISSION FEE

Rs. 15,000/- (Admission Fee is payable once at the beginning of study and is non-refundable/nontransferable)

SECURITY DEPOSIT FEE

Rs. 5,000/- (Security Deposit Fee is payable once at the beginning of study and is refundable)

STUDENT ACTIVITY FEE

Rs. 500/- per semester

TUITION FEE (Current Structure)

Year 1 Rs. 150,000/- per annum

Year 2 Rs. 150,000/- per annum

Year 3 Rs. 150,000/- per annum

Year 4 Rs. 150,000/- per annum

Note:

Any additional taxes imposed by the government will be the liability of the students/parents/guardian. (The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.)

Examination Fee will be charged separately.

CAREER OPPORTUNITIES

A graduate of BS in Communication and Media Studies have different career opportunities in the field of advertising, public relations, media management, Journalism, Filmmaking and production houses. Moreover, it also provides basis to enter into academics for media education.

IMPORTANT CONTACT NUMBERS

Phone: 021-35305474, 021-35862937 Ext: 487, 485

IMPORTANT LOCATIONS

Admin Offices

Right Wing, 3rd Floor, Health TV Building



FACULTY MEMBERS

FOUNDING DIRECTOR

Faizan S. Syed

FACULTY

Mr. Iqbal Jamil
Director
M.A, Social Work, University of Karachi

Lecturer:
Daneyal Sufi
BA (Hons) Media and Cultural Studies, Lancaster
University

M.A, Cinematography, Bournemouth University
Faryal Gul
BS Mass Communication, University of Karachi

Research Assistant/ Coordinator
Farah Shah
BS Mass Communication, University of Karachi

VISITING FACULTY

Prof. Dr. Naveed A. Tahir
M.A, International Relations, University of Karachi
Ph.D, European Studies, University of Karachi

Prof. Dr. Rakshanda Talat
M.A, Psychology, University of Karachi
Ph.D, Psychology, University of Karachi

Dr. Azra Anjum
M.A. Political Science, University of Karachi
Ph.D Political Science, University of Karachi

Dr. Nabeel Zubairi
M.A. Sociology, University of Karachi
Ph.D. Sociology, University of Karachi

Iffikhar Abid
Double M.A (Equivalence) in Islamic Studies and Arabic
MS in Pakistan Studies, Pakistan Study Centre, UoK

Sohail Abdullah
BFA Sculpture, The Indus Valley School of Art and
Architecture
MFA Craft and Material Studies, Virginia Commonwealth
University

Mahira Ansari
MBA, IBA- Karachi

Sausan Saulat
B.F.A Painting, The Indus Valley School of Art and
Architecture
M.F.A Painting, The Savannah College of Art and Design,
Atlanta

Naveed Arshad
M.A, Mass Communication, University of Karachi

Syed Jamiluzzafar
M.A. Philosophy, University of Karachi

Fatima Hafim Anjary
M.A. Mass Communication, University of Karachi

Nabeel Siddiqui
BS Media Studies, Iqra University
MS Media Studies, SZABIST

Ridah Zoheb
M.A, Mass Communication, University of Karachi



UNIVERSITY POLICIES

REFUND POLICY

(Withdrawal Due To Any Reason) Refund of fee will be according to following rules:

- * Withdrawal before start of full tuition fee course.
- * Within 45 days of start of half tuition fee course.
- * After 45 days of start of No Refund
- * Admission fee is non refundable in all cases.

STUDENT COUNSELLING

Counselling is provided by a professional counsellor and staff members. This counselling is designed to assist students in resolving personal problems that are interfering with their academic progress and success. Such problems might include difficulty in adjusting to college, family concerns and/or low self-esteem.

CODE OF CONDUCT

Students are expected to observe generally accepted standards of conduct. The University reserves the right to exclude any student whose conduct is injurious to the University. Policy decisions pertaining to student promotion are based on laid down Rules and Regulations approved by the Governing Body of the University. A printed booklet on the approved rules and regulations on student promotion is provided to the students on enrollment.

FINANCIAL POLICY

Students seeking admission to Ziauddin University are expected to

- * All dues need to be paid within 2 weeks of commencement of the academic year
- * Late fee charges will be levied as per University Policy after due date.

pay the fees approved by the Governing Body of the University. Admission fee is submitted only once, at the time of admission to the first year. For subsequent years, students are required to pay only the tuition fee.

For local students, all fees are paid in Pakistani currency, and for Overseas students all fees are paid in US dollars.

Parents/guardians are advised to ensure that fee for each academic year is paid within the due date.

The University reserves the right to cancel admission if the fee is not paid within the due date. Students who specific time repeat the year due to failure or otherwise are required to pay the tuition fee for the year/s being repeated.

The University does not handle cash or personal cheques. Fees must be paid in the form of pay order payable to Ziauddin University. Late Fee charges will be levied as per university policy after due date

FINANCIAL AID

The University provides this facility to limited number of candidates based on merit and individual needs. Each case is treated on individual basis and decisions are made by the Financial Aid Committee. The relevant information can be obtained from the administration.

