

# ADMISSION SESSION PROSPECTUS 2023-24

## **INSTITUTE OF ALLIED HEALTH SCIENCES**

**RAWALPINDI MEDICAL UNIVERSITY** 



# **CONTENTS**

1.	MESSAGE FROM THE VICE CHANCELLOR	3
2.	MESSAGE FROM THE DEAN	4
3.	MESSAGE FROM THE DIRECTOR	5
4.	JOURNEY OF RAWALPINDI MEDICAL UNIVERSITY	6
5.	MISSION STATEMENT	7
6.	VISION	7
7.	OBJECTIVES	7
8.	INSTITUTE OF ALLIED HEALTH SCIENCES	12
9.	FACULTY RMU	13
10.	DOCTOR OF PHYSICAL THERAPY	15
11.	MEDICAL IMAGING TECHNOLOGY	25
12.	OPTOMETRY & ORTHOPTICS	33
13.	ORTHOTICS & PROSTHETICS	45
14.	MEDICAL LABORATORY TECHNOLOGY	53
15.	LIBRARY & COMPUTER LAB	63
16.	COCURRICULAR ACTIVITIES	73
17.	RULES AND REGULATIONS	79
18.	CAFETERIA	85





## MESSAGE OF VICE CHANCELLOR

The importance of Allied Health Sciences is increasingly being recognized. Institute of Allied Health Sciences, Rawalpindi Medical University believes in developing a multidimensional comprehensive health care approach encompassing all the four elements of health service. i.e prevention, promotion, treatment and rehabilitation. We aspire to include a health care team approach at all levels of health care delivery for a comprehensive health care delivery system. Allied Health Sciences training programs at par with the international standards are generally lacking in the country especially in the public sector. The fields like Medical Imaging Technology, Doctor of Physical Therapy, Medical Laboratory Technology, Orthotics & Prosthetics and Optometry & Orthoptics have a wide scope in public & private sector.

The numbers of specialities are increasing day by day and the need for corresponding increase of Allied Health professionals is need of the day. It is relevant to mention that in foreign countries, these professionals play major role in the treatment and rehabilitation. Punjab and Federal Government are taking initiative for the establishment and development of these services.

University of Health Science identified the gap in our health delivery system & pioneered the idea of filling these gaps. Allied Health Sciences professions are very important component of health care system which has been neglected so for. Rawalpindi Medical College affiliated with UHS decided to start the degree programmes for Allied Health Sciences in five disciplines in 2007. Now Rawalpindi Medical University has continued this vision and taking its first batch of Allied Health Sciences.

All the disciplines of Allied Health Sciences at RMC have dedicated team working under the leadership of their Supervisors, Coordinators. The necessary teaching and training atmosphere as well the required audiovisual aids are available for students of all disciplines.

To date, fourteen batches of this institution has acquired their degrees in five disciplines and are now serving in different public and private institutions. I am confident that the graduates acquiring their degrees will enjoy prestige, pride and global recognition with expanding career opportunities.

PROF. DR. MUHAMMAD UMAR

Vice Chancellor Rawalpindi Medical University & Allied Hospitals, Rawalpindi

### MESSAGE OF DEAN IAHS



It is indeed an honor for me to be the Dean Institute of Allied Health Sciences, Rawalpindi medical University, and what adds to my pleasure and honor is the caliber of students of AHS. They are intelligent, promising, keen learners and bright. They have brought good name to their institute by securing top positions in the university, pursuing higher education and by getting prized jobs in their fields both nationally and internationally. With the upgradation of RMC to RMU, institute of AHS is now an integral part of RMU. It is hoped that this development will further improve the standards of teaching and training of these students. Under the dynamic patronage of Prof Dr Muhammad Umar, Vice Chancellor RMU, this institute is expected to grow, expand and flourish as never before. I take pride in saying that as part of development schemes of RMU, Institute of AHS plans to add further courses and also start post graduate degrees and diplomas in various disciplines. I hope and pray that all the efforts of Vice Chancellor and Faculty of IAHS bear fruit and the institute performs much better in producing highly trained, skilled and professional graduates.

#### **PROF.DR.WAFA OMER**

Dean Institute of Allied Health Sciences Rawalpindi Medical University, Rawalpindi



## MESSAGE OF DIRECTOR IAHS

Institute of Allied Health Sciences, Rawalpindi Medical University (IAHS-RMU) is dedicated to provide health care education and clinical training to a diverse group of future leaders. Allied Health Sciences is an emerging field in our country, which has a big horizon and a good potential. Throughout the world this specialty is already proving its worth. A career dedicated to allied health sciences could see you providing diagnostic, technical, therapeutic and direct patient care and support. You will treat and provide vital assistance to patients and work with medical teams including doctors and nurses to deliver the best possible patient outcomes.

At Rawalpindi Medical University, we take your potential and ambition for delivering quality health services and make it a reality. Prepare to make a difference in the lives of others and the overall health of your community, as you develop your knowledge and abilities to become a fast-thinking, highly skilled allied health professional. Institute of Allied Health Sciences, RMU is playing a key role in both public and private health care delivery systems. Currently, IAHS-RMU is offering many signature programs including;

- 1. Doctor of Physical Therapy(DPT)
- 2. Medical Imaging Technology

3. Optometry & Orthoptics

- 4. Medical Laboratory Technology
- 5. Orthotics & Prosthetics.

The Rawalpindi Medical University provides an excellent academic environment for its students which is not only in line with the societal values but is also synchronized by affection and self respect. It maintains harmony, discipline and strictly follows the academic calendar. We are blessed with knowledgeable, dedicated and distinguished academics and clinicians. We provide our students with ample opportunities for professional and interpersonal growth through career counseling & placement, entrepreneurship, innovative scientific research, sports and a broad range of co curricular activities.

It is my utmost desire that this promising institution continues to attain remarkable successes under the sincere and competent leadership of Prof. Dr. Muhammad Umar, Vice Chancellor, Rawalpindi Medical university, his team and meticulously trained faculty & staff. I also hope for the upcoming students to pave new avenues for Allied Health Sciences with pure zeal and passion.

#### DR. MUHAMMAD UMAR

Director Institute of Allied Health Sciences Rawalpindi Medical University, Rawalpindi

# JOURNEY OF RAWALPINDI MEDICAL UNIVERSITY

Rawalpindi Medical College Rawalpindi (Estd.1974) The College was established with Punjab Medical College and classes were initially started at University of Agriculture Faisalabad, in 1974. The college was shifted to the present site at Tipu Road, Rawalpindi, in November 1974, where all the basic departments were developed. The first principal of the college was Prof. M. Latif. In 2008, the new campus at Holy Family Hospital started functioning. At present, first and second year classes are held at Tipu Road (old campus) and third, fourth and final year at Holy Family Hospital Complex (new campus). The teaching hospitals attached to the college are the Holy Family Hospital, Benazir Bhutto Hospital and District Headquarters Hospital, Rawalpindi. These teaching hospitals provide 1278 beds for the patients. A new teaching hospital (650 beds) has been added to the existing facilities. The college has so far produced more than 7500 graduates. The students of RMC are referred to as Rawalians. There are about 1400 Rawalians working in UK, USA, Australia, Canada, South Africa, Gulf States and Far Eastern countries. The college started its Institute of Allied Health Sciences in November 2007 and classes of first batch of B.Sc (Honours) started in first week of February 2008. The purpose of the establishment of the institute was to produce quality Allied Health Professionals to provide quality care / diagnostic services in the field of Physiotherapy, Orthotics & Prosthetics, Optometry, Medical Imaging Technology & Medical Laboratory Technology. All the courses were affiliated with University of Health Sciences.

Institute of Allied Health Sciences is offering an unparalleled academic education as well as access to a wide spectrum of clinical experiences. The faculty of the Institute of Allied Health Sciences has outstanding scholars and clinicians. In addition, many of our faculty members are professional leaders who establish the trends that will affect trainees, their practices and the patients they will serve in the future.

In 2016 under the leadership of Prof. Dr. Muhammad Umar the college was converted in Rawalpindi Medical University (RMU). Aside from other medical courses in RMU it has, its Institute Of Allied Health Sciences, working under the guidance of Dean IAHS.

# **MISSION STATEMENT**

Provide the students with a solid platform on which to pursue higher education, deliver quality services, engage in research, perform their duties with sincerity and obligation to their institution and country and to believe in themselves.

# VISION

Institute of Allied Health Sciences, Rawalpindi Medical University strives to produce best allied health care professionals equipped with the best of skills, who are able to apply those skills in the best possible way.

# **OBJECTIVES**

- 1. To provide the best opportunity of pursuing a career in allied health sciences by delivering high quality education in various disciplines of allied health sciences.
- 2. To steer IAHS students and graduates towards post graduation, thus facilitating them in achieving their goals.
- 3. To inculcate values like honesty, sincerity, hard work and loyalty among students and graduates of IAHS.
- 4. To provide the students with a congenial, friendly, professional and healthy environment for learning & acquiring skills and finally polishing of their personalities.
- 5. To groom our students to make better human beings.



# RAWALPINDI MEDICAL UNIVERSITY & ALLIED HOSPITALS

The teaching and training activities for the students of Allied health sciences will be in the following places depending on the course

- RMU TIPU ROAD RAWALPINDI
- RMU NEW TEACHING BLOCK, H.F.H
- HOLY FAMILY HOSPITAL
- BENAZIR BHUTTO HOSPITAL
- DISTRICT HEAD QUARTER HOSPITAL





ACADEMIC COUNCIL R. NUHAMMAD SHARE U SHARE THE STREET STREET SHARE

MR. HANIS ABBASI





Ð.

0





# COURSES OFFERED IN INSTITUTE OF ALLIED HEALTH SCIENCES

DOCTOR OF PHYSICAL THERAPY BACHELOR OF SCIENCE IN ORTHOTICS AND PROSTHETICS BACHELOR OF SCIENCE IN OPTOMETRY AND ORTHOPTICS BACHELOR OF SCIENCE IN MEDICAL IMAGING TECHNOLOGY BACHELOR OF SCIENCE IN MEDICAL LABORATORY TECHNOLOGY

# FACULITY FOR BASIC SCIENCES

#### DEPARTMENT OF ANATOMY

#### **ASSOCIATE PROFESSORS**

Dr. Ifra Saeed Dr. Ayesha Yousaf

#### **ASSISTANT PROFESSORS**

Dr. Mohtasham Hina Dr. Sarwar Zia Dr. Arslan Manzoor Mughal

#### DEPARTMENT OF PHYSIOLOGY

#### **PROFESSOR** Dr. Samia Sarwar

#### ASSOCIATE PROFESSOR

Dr. Syed Muarraf Hussain Dr. Shmyla Hamid

ASSISTANT PROFESSORS Dr. Sidra Hamid

#### DEPARTMENT OF BIOCHEMISTRY

ASSOCIATE PROFESSOR

Dr. Tehmina Qamar

ASSISTANT PROFESSORS

Dr. Aneela Jamil

#### DEPARTMENT OF PHARMACOLOGY

#### ASSOCIATE PROFESSOR

Dr. Asma Khan

#### **ASSISTANT PROFESSORS**

Dr. Attiya Munir Dr. Zunera Hakim Dr. Sobia Javed

#### SENIOR DEMONSTRATOR

Dr. Haseeba Dr. Sajida Nasreen Dr. Rubina Kousar Dr. Uzma Umer

#### DEMONSTRATOR

Dr. Arsheen Arshad Dr. Omaima Asif Dr. Sonia Alamgir

#### DEPARTMENT OF FORENSIC MEDICINE

#### ASSOCIATE PROFESSOR

Dr. Rizwana Qayyyum

#### DEPARTMENT OF COMMUNITY MEDICINE

#### PROFESSOR

Dr. Syed Arshad Sabir

#### ASSISTANT PROFESSOR

Dr. Sana Bilal Dr. Khola Noreen Dr. Afifa Kulsoom Dr. Rizwana Shahid

#### ADDITIONAL PRINCIPAL MEDICAL OFFICER

Dr. Abdul Rehman

#### **DEPARTMENT OF PATHOLOGY**

**DISCIPLINE SUPERVISOR** Prof. Dr. Mobina Ahsan Dodhy

#### **COURSE CO-ORDINATOR**

Dr. Syed Muhammad Ali

FACULTY MICROBIOLOGY Prof. Dr. Naeem Akhtar

#### CHEMICAL PATHOLOGY

Prof. Dr. Wafa Omer

HEMATOLOGY

Dr. Huma Amin

#### HISTOPATHOLOGY

Dr. Tayyaba Ali Dr. Aasiya Niazi

# DEPARTMENT OF PHYSICAL THERAPY

Program Offered:

DOCTOR OF PHYSICAL THERAPY (DPT) 05 YEARS DEGREE PROGRAM IN PHYSICAL THERAPY





# **INTRODUCTION**

Physiotherapy is a primary care, autonomous, client focused health profession concerned with enhancing mobility and quality of life by using clinical reasoning to deliver the most suitable treatment for and injury or condition. Physiotherapists help people to gain as much movement and physical independence as possible so they can resume their normal job or life style.

Physical therapy is an essential segment of modern health care system. It is a science of healing and art of caring. It pertains to the assessment, evaluation, diagnosis and treatment of musculoskeletal, Neurological, Cardio-Vascular and Respiratory systems functional disorders including symptoms of pain, edema, physiological, structural and psychosomatic ailments. It deals with evidence based methods of treatment in movement, manual therapy, physical agents, and therapeutic modalities to relieve the pain and other complications. Hence, physical therapy covers basic parameters of healing sciences i.e. preventive, promotional, diagnostic, rehabilitative and curative.

Physiotherapy department of Holy Family Hospital have state of the art physiotherapy department equipped with hi-tech equipment for teaching, training and treatment facilities. The gym and cubicles consist of latest electrotherapy equipments and exercise facilities, both for male and female, whereas the class rooms are equipped with multimedia and other teaching aids of international standard. The classes will be conducted in the Department of Physiotherapy Holy Family Hospital, RMU and other Allied hospitals.

# **CARRIER OPPORTUNITIES**

After completion of 5 year doctor of physical therapy degree, one can serve as physical therapist in rehabilitation centers, nursing homes, Hospital OPDs, Community health care centers, Fitness centers, Occupational health centers, in sports field as sports therapist and as a part of NGOs. They can even serve independently in clinical settings or pursue career in the field of academics as lecturer or in the field of rehabilitation research as an active researcher. Regarding higher studies in field; master's degree programs are offered in multiple domains comprising of Neuromuscular, Orthopedic, Musculoskeletal, Cardiopulmonary, Sports, Pain management, Gynecology / women's health, Geriatrics & Pediatrics. The graduates of Physiotherapy can also pursue their career in the field of mental health, occupational health, neurology & clinical electrophysiology. As field of mental health, neurology and different domains of rehabilitation.

# **GOALS OF THE PROGRAM:**

# THE PURPOSE OF THE DOCTOR OF PHYSICAL THERAPY PROGRAM (DPT) IS TO PREPARE PHYSICAL THERAPISTS WHO WILL:

- 1. Be primary providers of physical therapy care.
- 2. Serve as responsible members in the professional community and are willing and able to assume leadership roles in the communities they serve.
- 3. Identify researchable problems, advocate and participate in research, and incorporate research findings into clinical practice.
- 4. Understand and place in context the social, economic and cultural issues of practice and effectively advocate for changes in policy.
- 5. Correlate theory with practice and think creatively about, react to, adapt or shape new practice environments.
- 6. Participate in and provide education for communities, patients, peers, students and others.

# **OBJECTIVES OF THE PROGRAM**

#### **GRADUATES OF THE DOCTOR OF PHYSICAL THERAPY PROGRAM WILL:**

- 1. Demonstrate in-depth knowledge of the basic and clinical sciences relevant to physical therapy, both in their fundamental context and in their application to the discipline of physical therapy.
- 2. Understand, correlate and apply theoretical foundations of knowledge to the practice of physical therapy, evaluate and clarify new or evolving theory relevant to physical therapy.
- 3. Demonstrate the behaviors of the scholarly clinicians by developing and utilizing the process of critical thinking and inquiry, particularly focused on the improvement of the practice of physical therapy and the delivery of health care.
- 4. Engage in reflective practice through sound clinical decision making, critical selfassessment and commitment to lifelong learning.
- 5. Demonstrate mastery of entry level professional clinical skills, Provision of these services is based on the best available evidence and includes physical therapy examination, evaluation, diagnosis, prognosis, intervention, prevention activities, wellness initiatives and appropriate health care utilization.
- 6. Prepared to influence the development of human health care regulations and policies that are consistent with the needs of the patient and of the society.
- 7. Demonstrate leadership, management, and communication skills to effectively participate in physical therapy practice and the health care team.
- 8. Incorporate and demonstrate positive attitudes and behaviors to all persons.
- 9. Demonstrate the professional and social skills to adapt to changing health care environments to effectively provide physical therapy care.

### **DEPARTMENT OF PHYSICAL THERAPY**

Program Offered: DOCTOR OF PHYSICAL THERAPY (DPT) 05 YEARS DEGREE PROGRAM IN PHYSICAL THERAPY

#### **\*SCHEME OF STUDIES FOR 5 YEARS**

YEAR	NAME OF SUBJECT	Professional Examination	Clock Hours/year	Marks
	FIRST PROFESSIONAL YEAR			
1st Year	ANATOMY - I	YES	400	200
	PHYSIOLOGY - I	YES	300	200
	KINESIOLOGY - I AND BIOMECHANICS	YES	450	200
	ISLAMIC STUDIES / ETHICS &	YES	150	100
	PAKISTAN STUDIES	TES	150	100
	BEHAVIORAL SCIENCES	Professional	50	N/A
		Exam 3 <sup>rd</sup> Prof.	50	11/7
	INTRODUCTION TO COMPUTER	INTERNAL ASSESSMENT ONLY	50	N/A
			1400	700

YEAR	NAME OF SUBJECT	Professional Examination	Clock Hours/year	Marks
	SECOND PROFESSIONAL YEAR			
2nd Year	ANATOMY - II	YES	450	200
	PHYSIOLOGY - II	YES	300	200
	KINESIOLOGY - II AND ERGONOMICS	YES	300	200
	BIOCHEMISTRY AND GENETICS	YES	200	200
	MEDICAL PHYSICS	YES	200	100
	BEHAVIORAL SCIENCES	Professional Exam 3 <sup>rd</sup> Prof.	50	N/A
	HEALTH AND WELLNESS	INTERNAL ASSESSMENT ONLY	50	
			1550	900

#### **\*SCHEME OF STUDIES FOR 5 YEARS**

YEAR	NAME OF SUBJECT	Professional Examination	Clock Hours/year	Marks
	THIRD PROFESSIONAL YEAR			
3rd Year	PATHOLOGY & MICROBIOLOGY	YES	300	200
	PHYSICAL AGENTS & ELECTROTHERAPY	YES	300	200
	THERAPEUTIC EXERCISES & TECHNIQUES	YES	400	200
	BEHAVIORAL SCIENCES	YES	100	200
	TEACHING METHODOLOGY & COMMUNITY MEDICINE	INTERNAL ASSESSMENT ONLY	200	100
	SUPERVISED CLINICAL PRACTICE I,II	LOG BOOK SUBMISSION TO P.T DEPARTMENT	200	
			1600	900

YEAR	NAME OF SUBJECT	Professional Examination	Clock Hours/year	Marks
	FOURTH PROFESSIONAL YEAR			
4TH Year	MEDICINE	YES	200	200
	SURGERY	YES	200	200
	PT-I: MUSCULOSKELETAL AND NEUROLOGICAL PHYSICAL THERAPY	YES	400	200
	RADIOLOGY & DIAGNOSTIC IMAGING & EMERGENCY PROCEDURES AND PRIMARY CARE	YES	100	100
	BIOSTATISTICS & EVIDENCE BASED PRACTICE	YES	300	100
	SUPERVISED CLINICAL PRACTICE III,IV	LOG BOOK SUBMISSION TO P.T DEPARTMENT	200	
			1450	800

#### \*SCHEME OF STUDIES FOR 5 YEARS

YEAR	NAME OF SUBJECT	Professional Examination	Clock Hours/year	Marks
	FIFTH PROFESSIONAL YEAR			
5TH Year	PT-II: CARDIOPULMONARY, OBS-GYNAE, INTEGUMENTRY & MANUAL PHYSICAL THERAPY	YES	500	200
	CLINICAL DECISION MAKING & DIFFERENTIAL DIAGNOSIS	YES	100	100
	SCIENTIFIC INQUIRY, RESEARCH METHODOLOGY & RESEARCH PROJECT	YES	350	200
	PROFESSIONAL PRACTICE & COMMUNITY BASED REHABILITATION	YES	100	100
	PT-III, IV: PAEDIATRIC, GERIATRIC, SPORTS & PROSTHETICS & ORTHOTICS PHYSICAL THERAPY	YES	350	200
	SUPERVISED CLINICAL PRACTICE V, VI	LOG BOOK SUBMISSION TO P.T DEPARTMENT	200	
			1600	800

#### **HOUSE JOB:**

One year of house job will be incorporated at the end of five year Degree Program.

# FACULTY

#### **DISCIPLINE SUPERVISOR**

**Dr. Muhammad Umar** PhD Rehabilitation Sciences, PP-DPT, MPH, BSPT

#### **DISCIPLINE COORDINATOR**

**Dr. Hiba Rashid** MPhil-NPT, BSPT

#### **COURSE TUTORS**

**Dr. Noshina Sabir – PT** PP-DPT, BSPT

**Dr. Wardah Adil- PT** PP-DPT, BSPT

Dr. Misbah Marryam - PT MS-NMPT, BSPT

#### **VISITING FACULTY:**

Dr. Kiran Azam Khan-PT (MS-OMPT\*, DPT)

**Dr. Aqsa Tahir-PT** (DPT)

Dr. Sania Rizwan-PT (MS-NMPT\*, DPT)

**Dr. Humda Niaz-PT** (DPT)

# DEPARTMENT OF MEDICAL IMAGING TECHNOLOGY

PROGRAM OFFERED:

BACHEOLARS OF SCIENCE IN MEDICAL IMAGING TECHNOLOGY (MIT) 04 YEARS DEGREE PROGRAM









## MEDICAL IMAGING TECHNOLOGY PROGRAM INTRODUCTION

#### **INTRODUCTION & BACKGROUND:**

Medical imaging technology is an eval Technology which encompasses a variety of advanced imaging modalities that are used in medical diagnosis and interventional procedures. Medical imaging is undergoing a revolution from analog imaging to digital imaging. It shifted from conventional x-ray to new modalities such as Magnetic Resonance imaging (MRI). Radiology departments in hospitals are being renamed as Diagnostic Imaging Departments to indicate the new modalities.

#### AIMS AND OBJECTIVES:

The program would induct students for theoretical and practical training. Students will develop skills for patient care and monitoring skills, the application of the theories in the selected clinical areas, basic electronics, general radiology, fluoroscopy, computerized mammography, ultrasound, safety practices, team work, interpersonal communications, adaptation, oral and written presentation of technical information, use of technical equipment and problem solving. Students will develop specialties in one or more of the following areas:

General Radiology Computed Tomography Mammography Fluoroscopy Contrast Materials Nuclear Medicine Ultrasonography Magnetic Resonance Imaging

The program, in the end will yield technical staff trained to provide support in medical imaging to different departments of hospitals.

#### **CAREER OPPORTUNITIES:**

A medical imaging technologist is the key member of the health care team. Graduates of Medical Imaging Technology are working as CT, MRI and Nuclear medicine technologists in Government and Private Hospitals. They are also a part of health care team in reputable institutes including Combined Military Hospital, NORI hospital, Armed Forces Institute Of Radiology and Shaukat Khanum Hospital Lahore and Peshawar. They are producing high quality medical images that assist medical specialists and practitioners to describe diagnosis, monitor and treat the patients' injury or illness. Medical imaging graduates are also members of teaching faculty of different institutes which are carrying out the program of Medical Imaging. Students are taught as per international criteria which will help in development of their role as technologist capable of appreciation of image elements, image interpretation, teamwork and management. Our graduates have detailed knowledge of ultrasound which helps them in developing their role as sonographers both nationally and internationally.

# **TEACHING FACULTY**

#### Supervisor B.Sc. (MIT)

• Dr. Jahangir Khan Consultant Radiologist

#### Coordinator B.Sc. (MIT)

Dr. Qudsia Mushtaq
 Women Medical Officer

#### **Faculty Members:**

- Dr. Nasir Khan, HOD
  Associate Professor of Radiology
- Dr. Misbah Durrani Assistant Professor
- Dr. Anum Zahoor
  Assistant Professor
- Dr. Hina Hanif Assistant Professor

- Dr. Aniqua Saleem Senior Registrar
- Dr. Riffat Raja Senior Registrar
- Dr. Ashfaq Consultant Radiologist
- Dr. Sana Yaqoob
  Consultant Radiologist
- Miss Sana B.Sc (Hons) Medical Imaging Technology MS Healthcare Management

#### Visiting Faculty:

- Dr. Tahir Aziz
  Ex-Chief Consultant Radiologist (BBH)
- Miss Irum Rasheed
  B.Sc (Hons)
  Medical Imaging Technology
  MS Healthcare Management
- **Dr. Hasnain** Registrar Cardiologist, Holy Family Hospital
- Miss Ayesha Imtiaz
  B.Sc (Hons)
  Medical Imaging Technology
- Miss Sumiya Abid
  B.Sc (Hons)
  Medical Imaging Technology

#### **TRAINING CENTRE:**

The classes will be conducted in the Department of Radiology Holy Family Hospital, RMU and other Allied hospitals.

**COURSE SCHEME:** The training is spread over four years with a specific component for each year of training.

#### **FIRST YEAR**

#### Theoretical component:

Regional and Imaging Anatomy I, Basic Physiology, Basic Bio-Chemistry, General Pathology, Behavioral Sciences, Islamaiyat, Pakistan studies and Computer Education

#### Practical Component:

Hands- on training in basic imaging techniques in the Departments of Radiology

#### **SECOND YEAR**

#### Theoretical component:

Regional and imaging Anatomy II, Radiation Sciences & Technology, General Radiology, Biostatistics, Medicine and Pharmacology

#### Practical component:

Hands-on training in the above mentioned disciplines in the Departments of Radiology.

#### **THIRD YEAR**

#### **Theoretical Component:**

Ultrasound and Echocardiography, Nuclear Medicine, Surgery and Mammography and special radiological techniques.

#### Practical Component:

Hands on rotational training in above mentioned disciplines in the Departments Of Radiology and Medicine.

#### **FINAL YEAR**

#### Theoretical component:

Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Sociology and Research

#### **PRACTICAL COMPONENT:**

Training in Departments of Radiology related to above mentioned Disciplines. Research Report will be related to the interest of the students.

#### TRAINING AS TRAINERS

The students during final year of the program will be involved actively in the teaching and training of the junior classes so that the seniors become mentors for the juniors. This educational activity will be carried out under the direction and supervision of the faculty members.



# DEPARTMENT OF OPTOMETERY AND ORTHOPTICS

PROGRAM OFFERED:

BACHEOLARS OF SCIENCE IN OPTOMETERY AND ORTHOPTICS 04 YEARS DEGREE PROGRAM






# **INTRODUCTION & BACKGROUND**

Optometry is an established field in well developed countries with optometrists playing an important role in eye care by providing their services in the field of refraction contact lens practice low vision management orthoptics and ophthalmic dispensing.

In Pakistan, the field of optometry has evolved over the last decade. There is a significant increase in demand of optometrists, especially with the creation of posts by Government of Punjab at teaching hospital, DHQ hospitals and THQ hospitals. There is also substantial scope for jobs in non governmental organizations to meet the requirement of the country.

At Pakistan, post gradation couses after B.Sc Optometry has been started including M. Phil leading to PhD. 5 year programme, Diagnostic Ophthalmology, master in Public Health and community ophthalmology started at college of ophthalmology& Allied Vision Sciences Lahore.

The higher education in optometry at worldwide level is 4 year programme M. Phil/ PhD after 4 year graduation in the optometry &Orthoptics in following research areas.

- 1. Pediatric Optometry
- 2. Community Health Optometry
- 3. Low Vision Residency
- 4. Primary Eye Care
- 5. Vision Therapy (Amblyopia) & Rehabilitation
- 6. Cornea & Contact Lens
- 7. Ocular Diseases
- 8. Geriatric Optometry
- 9. Refractive & Ocular Surgery
- 10. Retinal Pathology

This paucity of trained manpower and lack of specially trained and qualified personnel was a major initiative for Rawalpindi Medical College for starting this elaborate and well structured training program, in this university.

### **AIMS & OBJECTIVES**

- To introduce a four years bachelor Program in Optometry and Orthopticsand provide students the opportunity to have a well structured training in Optometry.
- To obtain up to date knowledge for functions and recent advances in Optometry and Orthoptics.
- To alienate the shortage of trained Ophthtalmic Midlevel Personnel and to focus on Human Resource Development.
- To provide clinical attachment for trained Opththalmic Midlevel Professionals in both Private and public hospitals in the country.
- To establish the institutionalized training in the field of Optometry and Orthoptics at par with international level.
- To have international collaboration with well recognized institutions in respective disciplines for developing the program, and postgraduate fellowship training in Optometry and Orthoptics To establish a school of Optometry and Orthoptics.

### **PROGRAM OF STUDY**

These duration of the degree program will be four years. This degree program will follow the curriculum / syllabus approved by UHS with annual examination system. The B.Sc Optometry and Orthoptics course will include classroom lectures, laboratory exercises, and clinical rotations in allied hospitals of RMC. All students must complete course work within the prescribed period of the course. The students failing in any course will be given only one chance to repeat the course before starting next level class. There will be monthly term assessments. One period of one hour four to five days a week for 36 months shall be spent on interactive tutorial sessions. During these sessions, the students will participate actively in group discussions on topics designated. The rest of the time shall be spent in the out patients clinics. Students will be given good clinical exposure in the Refractions, contact lenses, low vision and Orthoptics. The Final year will be meant for on job training. This includes eight courses of Practical working with Six week blocks.

#### MONITORING AND EVALUATION OF PROGRAM

By involvement/ input from external faulty / examiners. Regular feedback from the students though special forms.

### **FACULTY OPTOMETRY & ORTHOPTICS**

#### **Discipline Supervisor**

#### Prof. Dr. Fuad Ahmad Khan Niazi

MBBS, FCPS, FRCS (Glasgow) Dean Faculty of Eye & ENT Rawalpindi Medical University & Allied Hospitals, Rawalpindi.

#### **Discipline Co-ordinator**

**Dr. M. Arshad K Malik** MBBS, C-HCQM (RMU) Liaison Officer Ophthalmology Department Holy Family Hospital Rawalpindi

#### **Visiting Lecturers**

Sehrish Akram BSc Hons Optometry & Orthoptics, RMU MS (HCM)\*

#### Saba Ghalib

BSc Hons Optometry & Orthoptics, RMU MS (HCM)\*

#### **Visiting Faculty**

#### Dr. Sidra Jabeen

MBBS, FCPS Assistant Professor Holy Family Hospital Rawalpindi **Dr. Sikandar Hayat** MBBS, MPH Registrar Eye Department Holy Family Hospital Rawalpindi

#### **Dr. Saria Bano** MBBS, FCPS Senior Registrar Holy Family Hospital Rawalpindi

### **COURSE SCHEME**

### FIRST PROFESSION SUBJECTS (1<sup>ST</sup> YEAR)

Paper-I Basic Anatomy & Physiology		
Theory Marks: 90		
	ks in each subject	
Total Marks: 100		
Pass Marks: 50%		
Total study hours: 200		
Paper-II Basic Biochemistry & General Pathol	Basic Biochemistry & General Pathology	
Theory Marks: 90		
Internal Assessment 05 Mar	ks in each subject	
Total Marks: 100		
Pass Marks: 50%		
Total study hours: 200		
Paper-III Islamic Studies/ Ethics & Pakistan St	Islamic Studies/ Ethics & Pakistan Studies	
Theory Marks: 54		
•	ks in each subject	
Total Marks: 60	,	
Pass Marks: 33%		
Paper-IV Behavioural Sciences & Computer Ed	ducation	
Paper-IVBehavioural Sciences & Computer EdTheory Marks:90	ducation	
Theory Marks: 90	<b>ducation</b> ks in each subject	
Theory Marks: 90		
Theory Marks:90Internal Assessment05 Mar		

### SECOND PROFESSION SUBJECTS (2<sup>ND</sup> YEAR)

Paper-I	Ophthalmic Anatomy and Physic	blogy	
	Theory Marks:	90	
	Internal Assessment	10 Marks	
	Practical Marks	90	
	Internal Assessment	10 Marks in each subject	
	Total Marks:	200	
	Pass Marks:	50%	
	Theory hours:	200	
	Practical hours:	200	
	Total study hours:	200	
Paper-II	Physiology and Visual Optics		
	Theory Marks:	90	
	Internal Assessment	10 Marks	
	Practical Marks	90	
	Internal Assessment	10 Marks in each subject	
	Total Marks:	200	
	Pass Marks:	50%	
	Theory hours:	200	
	Practical hours:	200	
	Total study hours:	400	
Paper-III	Physical, Geometrical an	Physical, Geometrical and Instrument Optics	
	Theory Marks:	90	
	Internal Assessment	10 Marks	
	Practical Marks	90	
	Internal Assessment	10 Marks in each subject	
	Total Marks:	200	
	Pass Marks:	50%	
	Theory hours:	200	
	Practical hours:	400	
	Total study hours:	600	

#### Paper-IV

#### **Orthoptics, Squint and Low Vision**

Theory Marks:	90
Internal Assessment	10 Marks
Practical Marks	90
Internal Assessment	10 Marks in each subject
Total Marks:	200
Pass Marks:	50%
Theory hours:	200
Practical hours:	400
Total study hours:	600

### THIRD PROFESSION SUBJECTS (3<sup>RD</sup> YEAR)

Paper-I	Ophthalmic Dispensing and Cont	act Lenses	
	Theory Marks:	90	
	Internal Assessment	10 Marks	
	Practical Marks	90	
	Internal Assessment	10 Marks in each subject	
	Total Marks:	200	
	Pass Marks:	50%	
	Theory hours:	100	
	Practical hours:	200	
	Total study hours:	300	
Paper-II	Ophthalmic Disease and I	Ophthalmic Disease and Pharmacology	
	Theory Marks:	90	
	Internal Assessment	10 Marks	
	Practical Marks	90	
	Internal Assessment	10 Marks in each subject	
	Total Marks:	200	
	Pass Marks:	50%	
	Theory hours:	100	
	Practical hours:	200	
	Total study hours:	300	

Paper-III	Clinical Optometry and Exan	nination
-	Theory Marks:	90
	Internal Assessment	10 Marks
	Practical Marks	180
	Internal Assessment	20 Marks in each subject
	Total Marks:	300
	Pass Marks:	50%
	Theory hours:	100
	Practical hours:	200
	Total study hours:	300
Paper-IV	Occupational Optometry and	Preventive Ophthalmology
	Theory Marks:	90
	Internal Assessment	10 Marks
	Practical Marks	90
	Internal Assessment	10 Marks in each subject
	Total Marks:	200
	Pass Marks:	50%
	Theory hours:	100
	Practical hours:	200
	Total study hours:	300
FINAL PROFESSION	SUBJECTS (4 <sup>TH</sup> YEAR)	
Paper-l Pedia	atric Optometry	
	Theory Marks:	90
	Internal Assessment	10 Marks
	Practical Marks	90
	Internal Assessment	10 Marks
	Total Marks:	200
	Pass Marks:	50%
	Theory hours:	100
	Practical hours:	200

Paper-II	Ophthalmic Instrumentation	
	Theory Marks:	90
	Internal Assessment	10 Marks
	Practical Marks	90
	Internal Assessment	10 Marks
	Total Marks:	200
	Pass Marks:	50%
	Theory hours:	100
	Practical hours:	200
	Total study hours:	300
Paper-III Bio-statistics and Research Me		h Mothods
Faper-III		in methous
гарет-ш	Theory Marks:	90
гарет-ш		
нарег-ш Гарег-ш	Theory Marks:	90
гарег-ш	Theory Marks: Internal Assessment	90 10 Marks
Faper-III	Theory Marks: Internal Assessment Practical Marks	90 10 Marks 90
гарег-ш	Theory Marks: Internal Assessment Practical Marks Internal Assessment	90 10 Marks 90 10 Marks
гарег-ш	Theory Marks: Internal Assessment Practical Marks Internal Assessment Total Marks:	90 10 Marks 90 10 Marks 200
нарег-ш	Theory Marks: Internal Assessment Practical Marks Internal Assessment Total Marks: Pass Marks:	90 10 Marks 90 10 Marks 200 50%



# DEPARTMENT OF ORTHOTICS AND PROSTHETICS

PROGRAM OFFERED:

BACHEOLARS OF SCIENCE IN ORTHOTICS AND PROSTHETICS (O & P) 04 YEARS DEGREE PROGRAM

















### **INTRODUCTION**

One of the most important components of rehabilitation and support services is assistive devices which often provide the first step to ensure that people with disabilities are equal members of society. Among assistive devices, prostheses and orthoses are required by the majority of people with physical disabilities. Persons with physical disabilities, who have a need for prosthetics/orthotics and related rehabilitation services in developing countries, represent 0.5% of the population. By the year 2010 the combined population of Africa, Asia and Latin America will be approximately 6 billion. The estimated number of people in need of prosthetic and orthotic devices will be 30 million. The personnel estimated to provide services in prosthetics and orthotics would therefore be 180,000. Approximately, 40,000 trained orthotist and prosthetist are estimated to be needed.

Mobility is the first step to access basic rights including access to food, shelter, education, job/income, equal opportunities and equal citizenship. The most important components in the restoration of mobility are assistive devices such as orthoses, prostheses and mobility aids. Prosthetics and orthotics services play a major role in enabling a person with a disability to change from being immobile to becoming mobile, a passive receiver to an active contributor, and isolation to inclusion. They also help to provide further means towards equality by helping a child with disability to go to school or an adult with disability to go for skills training or income generation activities.

Department of Orthotics and Prosthetics Benazir Bhutto Hospital was established in 2005 after the Earthquake and it is one of the few rehabilitation centres which are providing quality treatment services as well as quality education to the students.

### **CAREER OPPORTUNITIES**

The prosthetics/orthotics professionals are usually part of a multi-disciplinary rehabilitation team. After completion of this degree program, they can be involve in patient care or providing direct service to persons with disabilities in public or private sector, management and supervision of orthopedic workshop or orthotic rehabilitation centre, training and education, community services, research and development. They are carried out within an ethical code and complying with medical and legal requirements. After completing BSc (Hons) Degree graduates can pursue higher education in different fields like;

- M.phil Orthotics & Prosthetics
- MS public health
- MS biomedical sciences
- MS health informatics
- MS health care Management)
- MBA (Hospital Management)

## **GOALS OF THE PROGRAM**

## THE PURPOSE OF ORTHOTICS AND PROSTHETICS DEGREE PROGRAM IS TO PREPARE PROFESSIONALS WHO WILL:

- 1. Take primary responsibility for provision of prosthetic and orthotic treatment and provide this treatment according to nationally and internationally approved standards.
- 2. Provide care that is patient centered and evidence based, but arrive at clinical decisions through a process of analysis and critical thinking.
- 3. Serve as responsible members in the professional community and are willing and able to assume leadership roles in the communities they serve.
- 4. Be qualified to go on to higher levels of education such as post-graduate programmes.
- 5. Identify researchable problems, advocate and participate in research, and incorporate research findings into clinical practice.
- 6. Understand and place in context the social, economic and cultural issues of practice and effectively advocate for changes in policy.
- 7. Correlate theory with practice and think creatively about, react to, adapt or shape new practice environments.
- 8. Participate in and provide education for communities, patients, peers, students and others.

## **OBJECTIVES OF THE PROGRAM**

#### **GRADUATES OF ORTHOTICS AND PROSTHETICS PROGRAM WILL:**

- 1. Apply knowledge of physical sciences, social sciences, health sciences, culture and natural sciences to professional practice.
- 2. Demonstrate effective and appropriate use of available technology in various communications.
- 3. Participate in the development of practice management skills in various settings.
- 4. Work effectively in an inter/intra-professional collaborative setting.
- 5. Demonstrate social and professional responsibility and ethical behaviors in multicultural settings and scenarios.
- 6. Demonstrate competence in conducting appropriate examination, evaluation, and assessment of users across the individuals' lifespan and within a broad continuum of care.
- 7. Optimize the use of appropriate equipment, materials, components and techniques in prosthetic/orthotic services.
- 8. Demonstrate competence in developing and implementing appropriate prosthetic/orthotic service plans for users across the individuals' lifespan within a broad continuum of care.
- 9. Demonstrate, in a systematic and effective manner, the ability to impart knowledge when providing education for users, their caregivers, other health professionals, and the public at large.
- 10. Demonstrate appropriate competencies in research and evidence based practice.

## **COURSE SCHEME**

#### First year

- 1. Basic Anatomy
- 2. Basic Physiology
- 3. Basic Biochemistry
- 4. Basic Pathology
- 5. Basic Behavioral Sciences
- 6. Islamiyat
- 7. Pakistan Studies

#### Second Year

#### **Theoretical Component**

- Musculoskeletal Physiology &Pathology
- 2. Biomechanics
- 3. Math
- 4. Mechanics
- 5. Material & Workshop Technology

#### **Practical Component**

 Hand on Training in Orthotics (Lower Limb + Upper Limb + Spine)

#### **Third Year**

#### **Theoretical Component**

- 1. Clinical Orthopedics
- 2. Basic Radiology
- 3. Medicine
- 4. Psychology of Disabled
- 5. Workshop Management

#### **Practical Component**

 Hand on Training in Orthotics (Lower Limb + Upper Limb)

#### **Final Year**

#### **Theoretical Component**

- 1. Community Based Rehabilitation
- 2. Bio-Statics & Research Methods

#### **Practical Component**

- 1. Patient Bases Advanced Training at AORI, BBH in Prostheses
- 2. Research Report to the Subject of interest of the student.

### FACULTY

#### **DISCIPLINE SUPERVISOR**

**Dr. Amir Nawaz Khan** MPH, M.S (Orthopedics) Senior Registrar Department of Orthopedics BBH – RMU

#### **DISCIPLINE COORDINATOR**

**Dr. Ajla Javaid** BSPO (RMU), MS Biomedical NUST-SMME Senior Lecturer / Incharge Department of Orthotics & Prosthetics BBH – RMU

#### **Faculty Members**

**Ajla Javaid** BSc (Hons) Orthotics & Prosthetics, RMU MS Biomedical Sciences, (Ripah) MS Public Nutrition

Naima Maqsood Khan BSc (Hons) Orthotics & Prosthetics, RMU

#### **Visiting Faculty**

**Dr. Riaz Munawwar** (Clinical Orthopedics) MBBS, PGT Orthopedics BBH, RMU.

**Dr. Rana Adnan** Sr. Orthopedics BBH

**Dr. M. Kashif** (Psychology of Disabled) MBBS, FCPS, Psyciatry Assistant Professor Psychiatry Rawalpindi Medical University.

**Dr. Sualeha Sheikh** (Medicine) MBBS, FCPS Medicine Senior Registrar MU-I BBH RMU.

**Dr. Syeda Fatima** (Pathology) MBBS - RMU



# DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY

PROGRAM OFFERED:

BACHEOLARS OF SCIENCE IN MEDICAL LABORATORY TECHNOLOGY (MLT) 04 YEARS DEGREE PROGRAM













#### WHAT IS MEDICAL LABORATORY SCIENCE?

Medical Laboratory Science combines the use of sophisticated instruments and techniques with the application of theoretical knowledge to perform complex procedures on tissue specimens, blood samples and other body fluids. The tests and procedures that Medical Laboratory Technologists perform provide critical information enabling physicians to diagnose, treat and monitor a patient's condition.

#### WHO IS MEDICAL LABORATORY TECHNOLOGIST & WHAT DOES HE DO?

Medical Laboratory Technologists (MLTs) or Medical Laboratory Scientists (MLSs) are health professionals who perform laboratory analysis and provide information to physicians. They help physicians to diagnose, screen and treat patients, as well as monitor and prevent disease. However, after attaining special / specific training or practical experience or certification as medical laboratory technology is further classified and named Hematology Technologist, Histotechnologist, Cytotechnologist, Chemical Technologist, Blood Bank Technologist, Molecular Technologist, Forensic Technologist etc.

## MEDICAL LABORATORY TECHNOLOGISTS OPERATE A VARIETY OF SOPHISTICATED INSTRUMENTS.

They must have good motor skills, hand-eye coordination and manual dexterity. Ln addition to technical skills, they must have a strong attention to detail in order to detect subtle change to the microscopic appearance of blood, tissue and bacterial cells. MLTs must also determine the validity of the results they obtain, which requires analytical and critical thinking. MLTs work in an ever-evolving environment, and on occasion need to design new procedures to reflect the rapid pace of change in their workplace. Whether working alone or as a member of a team, the MLT must be able to manage time efficiently and communicate clearly.

#### WHY BECOME A MEDICAL LABORATORY TECHNOLOGIST?

Medical laboratory technology is a constantly evolving and rewarding career. The lab of today is a far more Equipped one than the lab of just ten years ago. As new discoveries advance scientific knowledge, the role of Technologist's will continue to change and expand. We can foresee the impact of future tests that may be developed for diagnosing health problems such as cancer or genetic disorders.

There is a wide range of Career option for Medical Laboratory. Technologist working in more than ten different disciplines i.e. Haematology, Transfusion Medicine, Histopathology, Cytopathology, Clinical Chemistry, Microbiology, Virology, Molecular Medicine, Forensic Sciences, Biotechnology etc.

- Bio Technology -Genetics
- Bio Informatics
- Histotechnology
- Cytotechnologylt
- Hematology
- Public Health

# RESEARCH AT DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY, RAWALPINDI MEDICAL UNIVERSITY

A research report research project thesis is mandatory for the successful completion of degree programme in medical laboratory by UHS. Department of MLT, RMU encourages MLT students in this regard & provides basic facilities, tools and proper supervision. Dr. Sofia Khan is a clinical 8- research supervisor of all students. However co-supervisor can be from another institute.

Final year B.Sc. (Hons) MLT students can do research in any of following areas.

- 1. Immunohaematogy
- 2. Clinical Microbiology
- 3. Advanced Clinical Chemistry
- 4. Advanced Clinical Immunology

Students can carry out their research project in any institute like NUST, Armed Forces Institute of Pathology, Army Medical College, Quaid-e-Azam University and PMAS University of Arid Agriculture etc. Rawalpindi Institute of cardiology, QAU and NUST. Recently our students are doing their research projects in Army Medical College & Arid Agriculture, Rawalpindi Institute of Cardiology as well.

Many research papers were presented & published in different national & international conferences & Journals by students & the graduate of department of Medical Laboratory Technology Institute of Allied Health Sciences, Rawalpindi Medical University, Rawalpindi. The research by one of our students has been selected & published by US National of Medicine, NIH, USA.

#### SPECIFIC LEARNING OUTCOMES

Following competencies will be expected from a student completing 4 years degree course in Medical laboratory Technology. The students should be able to:

(i) Learn and apply the practical theory (new techniques and procedures) of the laboratory directly to work place settings

- (ii) Demonstrate knowledge of medical terminology with special emphasis on writing and understanding the laboratory directly to workplace settings.
- (m) Demonstrate knowledge of medical terminology with special emphasis on writing and understanding the laboratory reports.
- Select and use appropriate, safe and effective tools to solve a variety of problems pertaining to collecting, transporting, handling and conducting tests on laboratory samples
- (v) Demonstrate knowledge of utilizing and performing corrective and preventative maintenance on a variety of instruments and sensitive (automated) equipment.
- (vi) Relate laboratory results to common disease process and draw and defend reasonable conclusions with proper satisfaction of the patients and their concerns.
- (vii) Perform and monitor quality control within predetermined limits in the laboratory.
- (vii) Help in the upgrading and expansion of the instrumentation and equipment and other supplies used in the laboratory.

#### **METHODS OF INSTRUCTIONS**

As a policy, active participation of the students is encouraged. Following teaching modalities are employed:

- Large group teachings (lectures)
- Small group teachings
- Assignments and Presentations
- Skills teachings
- Self-study and use of internet.

## **ACADEMIC SCHEDULE**

The training is spread over four years a specific component for each year of training.

#### **FIRST YEAR**

- 1. Basic Anatomy
- 2. Basic physiology
- 3. Basic biochemistry.
- 4. General pathology
- 5. Behaviourial§ciences
- 6. Islamiyat
- 7. Pakistan studies
- 8. Computer Education

#### **SECOND YEAR:**

- 1. Haematology and Blood Banking
- 2. Histopathology and Cytopathology

#### THIRD YEAR

- 1. Microbiology including Parasitology
- 2. Chemical Pathology
- 3. Immunology and Serology

#### FOURTH YEAR (ELECTIVE SUBJECTS)

- 1. Immunohematology
- 2. Advanced clinical chemistry
- 3. Clinical Microbiology
- 4. Advanced clinical immunology
- 5. Medical Genetics
- 6. Molecular Biology
- 7. Biostatistics And Research Methodology (Compulsory Subject)

### FACULTY OF MEDICAL LAB TECHNOLOGY PROGRAM

#### **DISCIPLINE SUPERVISOR**

Professor Dr. Mobina Ahsan Dodhy MBBS, FCPS (Hematology) Chairperson Department of Pathology, Rawalpindi Medical University & Allied Hospitals, Rawalpindi.

#### **COURSE CO-ORDINATOR**

**Dr. Syed Muhammad Ali** MBBS, CMT (UHS/UoL, UK), MHPE Department of Pathology, Rawalpindi Medical University, Rawalpindi.

#### **FACULTY**

#### **MICROBIOLOGY**

**Prof. Dr. Naeem Akhtar** MBBS, Ph.D (Scheffield, UK) Dean Basic Sciences & Diagnostics, Department of Pathology,

Rawalpindi Medical University & Allied Hospitals, Rawalpindi.

#### **CHEMICAL PATHOLOGY**

Prof. Dr. Wafa Omer

MBBS, M.Phil, Ph.D (Chemical Pathology), Department of Pathology, Rawalpindi Medical University, Rawalpindi.

#### **HEMATOLOGY**

Dr. Rabiya Khalid

MBBS, M.Phil (Hematology) Assistant Professor of Pathology, Consultant Hematologist, Rawalpindi Medical University, Rawalpindi.

#### HISTOPATHOLOGY

**Dr. Mudassira Zahid** MBBS, FCPS (Histopathology) Associate Professor of Histpathology Rawalpindi Medical University, Rawalpindi.



LIBRARY & COMPUTER LAB









# CONVOCATION


















# EXTRA CURRICULAR ACTIVITIES





















# RULES AND REGULATIONS

#### **RULES & REGULATIONS**

- The candidates and students are required to read, know and abide by the rules and regulations. Ignorance of rules and regulations shall not be considered as an excuse under any circumstances at any stage.
- The candidate has passed HSSC (Pre-Medical)/ equivalent examination with minimum of 60 per cent marks either from abroad or Pakistan. The subjects in HSSC/equivalent examination must include Biology and Chemistry.
- Admission process starts with the publication of advertisement in the month of December / January.
- There are total 125 seats (25 seats for each discipline).
- Selection is made strictly on merit (F.Sc. marks) by the selection committee.
- There are no quota seats.
- No hostel, accommodation and transport facilities are provided.
- After selection, the classes start in March every year.
- No change of discipline will be allowed after one month of start of classes.
- No refund of paid dues will be allowed in any case.

#### **REQUIRED QUALIFICATIONS**

• The candidates applying for admission against any category of seats must have passed the HSSC/FSc (Pre-Medical) examination from a Board of Intermediate and Secondary Education in Pakistan with not less than 60% unadjusted marks (660/1100).

OR

Passed an examination of a Foreign University/Board subject to the following:

- a) The examination is recognized as equivalent to Higher Secondary School Certificate (HSSC) (Intermediate levels) by the Inter-Board Committee of Chairmen (IBCC). It shall be the responsibility of the candidates to settle their cases with IBCC and should get equivalence certificate from IBCC only for recognition of their qualification.
- b) The score of the candidate in HSSC equivalent examination should not be less than 660/1100 (60%) marks according to the formula laid downby the Inter Board Committee of Chairmen (IBCC).
- c) A candidate shall not be eligible for admission if he/she has not studied and passed the subjects of Chemistry, Biology and Physics/Mathematics in his/her 9th, 10th, 11th and 12th Grade/ O & A level or other equivalent examination recognized by the IBCC. He/she must have passed English as a subject at O or A level.
- Age limit : 17-30
- No admission would be accepted after due date.
- Candidates must attach the following documents with the Admission Form. Except otherwise mentioned, the documents attached with the Admission Form must be attested by a Government Officer in BS 17 or above. The stamp of the officer must

bear his / her full designation and current place of duty:

- a) Two (02) attested copies of Matriculation (SSC) Certificate or result card issued by a Board of Intermediate and Secondary Education in Pakistan. Computer generated result cards will not be acceptable. Candidate having foreign qualifications (O-Level, 10<sup>th</sup> Grade and equivalent) must provide the attested copies of Equivalence Certificate issued by IBCC. A valid Interim or 47 Provisional equivalence certificate issued by IBCC will also be acceptable.
- b) Two (02) attested copies of HSSC Pre-Medical result card issued by a Board of Intermediate and Secondary Education in Pakistan. Candidates having foreign qualifications (e.g. A-Level, 12th Grade and equivalent) must provide the attested copies of Equivalence Certificate issued by IBCC. Valid Interim or Provisional certificate by IBCC will also be acceptable.
- c) Two (02) attested copies of Domicile Certificate of the candidate (In case of Children of Overseas Pakistanis/Dual Nationality Holders category only, domicile of Father/Mother shall also be acceptable). No other certificate or document (e.g. Birth Certificate, B-Form, CNIC etc.) is acceptable in lieu of Domicile Certificate of the candidate. Any candidate found to have domicile of more than one place shall be disqualified.
- d) Two (02) attested copies of CNIC of candidate.
- e) Two (02) attested copies of CNIC of Father / Mother. Overseas Pakistanis/Dual Nationality Holders may provide attested copies of their Pakistani Passport/ NIC/ NICOP/ POC or any other official document providing their Pakistani nationality.
- f) Three (03) recent photographs. One to be pasted on the Admission Form and to be attested on the front, and other two, attested on the back, to be attached with the form. Your photograph must be: Color; Passport size (4.5 cm high x 3.5 cm wide); Taken against a light blue background.

- Admission Form along with all required documents once submitted shall not be returned. Similarly, documents once submitted cannot be changed and shall be considered as final. Revision of result or improvement of marks by any Board after the submission of Admission Form shall not affect the merit list of admissions for the current year in any way. In other words, revised marks certificate shall not be acceptable once the candidate has submitted his/her Admission Form. Similarly, results declared after the submission of forms shall not be accepted for admissions in the current session.
- A candidate can submit only one admission form for a discipline. In case, he/she submits more than one form, the form(s) submitted subsequently will be rejected.
- Incomplete or unsigned Admission Forms will be rejected.

#### **SELECTION AND ADMISSION OF CANDIDATES**

- The candidate will be selected by the Admission Board. The decisions of Admission Board in respect of selection and admission shall be final.
- The selection of the candidates against open merit seats shall be made on the basis of Merit, Choice, Availability of seat, and in that order.
- Whenever two or more than two candidates are bracketed, i.e., they have exactly the same percentage after calculation, the one senior in age will be given preference to the other for the purpose of admission. In case the tie continues, higher score in Matriculation (SSC or equivalent) shall be preferred for admission.
- The Admission Board may refuse admission to any candidate who seems, for reasons to be recorded in each case at the time of interview, to be unsuitable or unlikely to become a good doctor. In case such a candidate is admitted, he/she can be struck off the rolls of the college, after issuing a notice to him/her to that effect.
- Selected candidates shall have to submit all original documents and certificates at the time of interview. The original documents of the selected candidates will be retained by the college concerned and will be returned on leaving the institution.
- No candidate will be admitted unless he/she has paid the fee and other dues. All dues must be paid by the due date, otherwise the admission of defaulting students will be cancelled and next candidate on merit will be considered for admission.

#### FEES AND SUBSCRIPTIONS

The fee structure for Session is as follows.

S. No	Course Offered	Fee 1 <sup>st</sup> Year	Annual fee For Subsequent Years
1	Doctor Of Physical therapy	130,000/-	125,000/-
2	Medical Imaging Technology	80,000/-	75,000/-
3	Orthotics & Prosthetics	80,000/-	75,000/-
4	Optometry & Orthoptics	80,000/-	75,000/-
5	Medical Laboratory Technology	80,000/-	75,000/-

#### **REGULATIONS FOR INTERNAL ASSESSMENT**

- The weightage of internal assessment shall be 10% in all subjects. 5% internal assessment marks shall be added to the aggregate score of Theory and 5% internal assessment marks to aggregate score of Oral and Practical Examination and not to an individual component like MCQs,SEQs Paper or Oral / Practical / Clinical Examination.
- Continuous internal assessment shall consist of evaluation at the end of each assignment, e.g. stages/sub-stages, class tests etc., attitudinal assessment from educational and or clinical supervisors, clinical skill assessment from clinical supervisors, and Year's work books.
- Assessment of Knowledge, Skills and Attitude shall contribute toward internal assessment. Methods used to assess these domains shall include Multiple Choice Questions of one-best type, Short essay questions, Oral/Viva, and Practical Clinical examinations.
- The score of internal assessment shall contribute 10% to final examination and final university examination of each subject shall contribute 90% to total score, and the candidate shall pass in aggregate.
- Awards of internal assessment in all the subjects of all the candidates shall be submitted to the Controller of Examinations along with Admission Forms for the annual examination. Internal assessment received after commencement of the final examination shall not be accepted.
- The marks of internal assessment shall be submitted only once a year prior to annual examination and the same shall be counted both for annual and



supplementary examinations. It is further emphasized that fresh assessment or a revision of assessment for supplementary examination shall not be permissible.

- Proper record of continuous internal assessment shall be maintained by respective departments of the medical/dental colleges.
- Internal assessment awarded in particular year may not be decrease subsequently detrimental to the candidate.

### CAFETERIA













### **Rawalpindi Medical University**

Institute of Allied Health Science Tipu Road, Main Campus Ph: 051-9330930 Website: www.rmur.edu.pk