



ADMISSION IN BS OPTOMETRY

PROSPECTUS

DEPARTMENT OF OPHTHALMOLOGY &
VISUAL SCIENCES (DOVS), DUHS

Session
2022-23

Email: admissions@duhs.edu.pk

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

MESSAGE BY VICE CHANCELLOR

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

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

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

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

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

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

Good Luck to the incoming freshmen!

MESSAGE BY CHAIRPERSON



DR. MAZHAR UL HASSAN

MBBS , MCPS, FCPS (OPHTH)

Fellowship in Pediatric Ophthalmology (Italy)

Professor & Head, Department of Ophthalmology UNIT-II

Chairperson of Dept of Ophthalmology (DMC, DUHS)

Dr Ruth K.M Pfau, Civil Hospital Karachi.

Dow University of Health Sciences is the only Public University in Sindh to offer the course of BS in Optometry. The Department of Ophthalmology and Visual Sciences is pleased to start this course in January 2020.

This course will be mainly based in the Dow International Medical College. However students will spend some time at the Dow Medical College. The Department of Ophthalmology and Visual Sciences has an excellent clinical faculty and this is going to be expanded with the addition of staff qualified in Optometry.

MESSAGE BY DIRECTOR



PROF. NISAR AHMED SIYAL

**MBBS (DOW), MCPS, FCPS, FCPS VITREORATINA
PROFESSOR & HEAD, DEPARTMENT OF OPHTHALOMOLOGY & VISUAL SCIENCES
DOW INTERNATIONAL MEDICAL COLLEGE (DIMC)
DOW UNIVERSITY OF HEALTH & SCIENCES (DUHS)**

Students of Optometry will be taught medical sciences and optics relevant to the field of Optometry. They will have exposure to a large number of clinical cases.

After completing the course they will have enough knowledge and expertise to become primary care providers to people with visual complaints. They will have employment opportunities in public and private sector institutes as well as eye clinics and optical outlets.

VISION STATEMENT DUHS

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

MISSION STATEMENT DUHS

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

BS Optometry

Millions of people all over the world suffer from visual impairment and blindness. Uncorrected refractive error is the leading cause of visual impairment globally.

In order to meet this challenge there is a need to develop human resources including optometrists to provide sustainable service delivery.

Optometry functions in a primary capacity. Optometrists do sight testing and give corrective prescriptions including spectacles. They examine the eyes and if there is any disorder make referrals to the Ophthalmologist for further care. They along with the Ophthalmologist have an important role in the prevention and treatment of blindness.

BS Optometry is a four year program covering all the theoretical and clinical aspects of training required by an Optometrist to achieve a successful career. Dow University of Health Sciences is the only public sector university in the Sindh province to offer this course.

INTRODUCTION

According to World Health Organization (WHO) estimates, two hundred and eighty five (285) million people suffer from moderate to severe vision loss with 39 million considered blind. Of these, 123 million (43%) have uncorrected distance refractive errors. In addition, there are 517 million people with near vision impairment due to uncorrected presbyopia. Uncorrected refractive error is the leading cause of visual impairment globally which places a financial burden on the economy and is a significant contributing factor to poverty and is avoidable.

Refractive errors account for the third most prevalent cause of blindness in Pakistan. Refractive errors accounts for 11.4% (0.23 million) of the blind. Visually impaired people are ten times more.

The increasing number of cases of avoidable blindness and visual impairment pose a significant challenge. Insufficient healthcare professionals, uneven distribution of resources, the inability to afford treatment and accumulation of affected population in unreachable areas adds to the magnitude of the problem. In order to meet the aims of the Global Action Plan, there must be a focus on the development of human resources, including optometrists, and models of sustainable service delivery.

Optometry addresses these challenges by providing a range of diagnostic, technical and direct patient care and support services required by patients and Ophthalmologists. Optometry functions in a primary care capacity in many developed countries and in developing countries at a secondary level as part of a multidisciplinary team including ophthalmologists.

BS Optometry is the University's qualification for training in Optometry. Optometry is a profession dealing with eye care. Optometrists are trained to examine the eyes and detect problems in eyesight and ocular abnormalities. Optometrists provide primary vision care. They do sight testing and give corrective prescriptions. They examine the eyes and make referrals if needed to Ophthalmologists.

The 4 year program will cover all the theoretical and clinical training required by an optometrist to achieve a successful career. There will be 8 semesters in all during the program.

Optometrists are essential primary eye care providers and along with Ophthalmologists have an important role in the prevention and treatment of blindness. Dow University of Health Sciences is the only public sector university in the province offering this course.

After successful completion of the course, the Degree of BS in Optometry will be awarded by the University. The successful candidate would be eligible to write his specialty as BS Optometry.

AIMS AND OBJECTIVES OF THE PROGRAM

At the end of the 4 year program the student should be able to:

1. Help increase the coverage of eye care in the country and play an important role in the prevention and treatment of blindness.
2. Perform sight testing at community level and primary as well as secondary and tertiary centers
3. Prescribe refractive corrections including spectacles, contact lenses and low vision aids
4. Perform binocular single vision tests and help in the management of strabismus and ocular motility disorders
5. Screen for blinding disorders such as cataract, glaucoma, diabetic retinopathy, age related macular degeneration and refer to ophthalmologist for treatment
6. To be able to operate various diagnostic equipment used in diagnosis and monitoring of eye disease.

TOTAL BREAKDOWN OF CREDIT HOURS		
S.#		
1.	General Education Courses	39
2.	Basic Sciences Major BS OPTOMETRY Major Subjects	15 39= 54
3.	BS OPTOMETRY Minor Subjects	33
	Total	126

ABBREVIATIONS:

GEC: General Education Courses

BS-M: Basic Sciences Major

M: Major

M^l: Minor

General Education Courses (GEC) Divided Into 3 Categories:

HEC Requirement for Undergraduate Courses				Requirement (BS OPTOMETRY)	Credit Hours
1.	Breadth Courses	Arts And Humanities (2 Courses)	<ol style="list-style-type: none"> 1. Philosophy 2. History 3. Creative Arts 	<ul style="list-style-type: none"> • History • Foreign Language 	3 3
		Social Sciences (2 Courses)	<ol style="list-style-type: none"> 1. Anthropology 2. Economics 3. Psychology 4. Sociology 5. Political Science 	<ul style="list-style-type: none"> • Psychology • Sociology 	3 3
		Natural Sciences (2 Courses)	<ol style="list-style-type: none"> 1. Physics 2. Chemistry 3. Geology 4. Biology 5. Ecology 	<ul style="list-style-type: none"> • Physics • Biology 	3 3
2.	Functional Skill Courses	Expository Writing (3 Courses)	<ol style="list-style-type: none"> 1. Writing or Publishing Technical Papers 2. Editing and Copy-Editing of documents 3. Learning how to translate from one Language to another 	<ul style="list-style-type: none"> • Basic English writing • Advance English writing • Academic Writing 	3 3 3
			Quantitative Reasoning (2 Courses)	<ol style="list-style-type: none"> 1. Information Technology 	<ul style="list-style-type: none"> • Computer Sciences • Biostatistics
3.	Civilizational Courses	Pakistan Studies (1 Course)		<ul style="list-style-type: none"> • Pakistan Studies 	3
		Islamiat Or Religious Studies (1 Course)		<ul style="list-style-type: none"> • Islamiat Or religious stuidies 	3
				Total Credit Hours: 39	

Basic Sciences Major (BS-M):

S.#	Major	Credit Hours
1.	Physiology	3
2.	Biochemistry	3
3.	Anatomy	3
4.	Research Methodology	3
5.	Research Project	3
		Total: 15

BS OPTOMETRY Major Subjects (M):

S.#	Major	Credit Hours
1.	Anatomy Ocular	3
2.	Physiology Ocular	3
3.	Ocular Disease I	3
4.	Pharmacology Ocular	3
5.	Ocular Disease II	3
6.	Contact Lens I	3
7.	Clinical Refraction I	3
8.	Clinical Refraction II	3
9.	Geometrical Optics	3
10.	Low vision	3
11.	Basic Orthoptics	3
12.	Visual Optics	3
13.	Instrumental Optics	3
14.	Low Vision Clinic	3
15.	Dispensing Optics	3
16.	Community ophthalmology	3
17.	Orthoptics advance	3
18.	Pediatric Optometry I	3
19.	Optical Shop Management	3
20.	Health & eye Care Management	3
21.	Specialized clinic	3
22.	Contact Lens II	3
23.	Orthoptics Clinic	3
24.	Contact Lens Clinic	3

Note: Student can opt any 9 courses (each course is of three credit hours) to fulfill the minimum credit requirement to qualify for the Bachelor of Science degree.

Semester	Courses	Credits hours	Credit hours/ semester
I	<ol style="list-style-type: none"> 1. Islamiat / Ethics 2. Computer Science 3. General Physiology 4. English Foundation 5. Physics 6. Anatomy (General) 	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	18
II	<ol style="list-style-type: none"> 1. History 2. Psychology 3. English Advance 4. Biology 5. General Biochemistry 6. Pakistan Studies 	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	18
III	<ol style="list-style-type: none"> 1. Academic Writing 2. Bio Statics 3. Foreign Languages 4. Geometric optics 5. Sociology 	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	15
IV	<ol style="list-style-type: none"> 1. Ocular Physiology 2. Ocular Anatomy 3. Visual Optics 4. Ocular disease I (Anterior segment) 5. Instrumental optics 	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	15
V	<ol style="list-style-type: none"> 1. Contact lens I 2. Ocular disease II (Posterior segment) 3. Clinical refraction I 4. Basic orthoptic 5. Low vision 	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	15
VI	<ol style="list-style-type: none"> 1. Orthoptic Advance 2. Contact lens II 3. Clinical refraction II 4. Dispensing Optics 5. Pharmacology 	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	15

VII	<ol style="list-style-type: none"> 1. Optical shop management 2. Research Methodology 3. Health & Eye care management 4. Community Ophthalmology 5. Pediatric optometry I 	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	15
VIII	<ol style="list-style-type: none"> 1. Contact Lens Clinic 2. Low vision Clinic 3. Orthoptic Clinic 4. Research project 5. Specialized clinic 	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	15

Note: The minimum credit requirement for each semester is 15 and student can opt to take up to 21 credits per semester, provided that departmentally determined credits and pre-requisite are met.

BASIC SCHEME OF THE PROGRAM

Total numbers of credit hours	126
Duration	4 years
Semester duration	16-18 weeks
Semesters	Eight
Course load per semester	14-18 Credit hours
Number of courses per semester	5-6

Eligibility Criteria

- HSSC (Intermediate Science) Pre-Medical/A-Level or Equivalent Min. 60% marks or equivalent duly certified by IBCC
- Candidate's Domicile Sindh.

Number of Seats: 30

1) Fee Structure of BS OPTOMETRY

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FEE TYPE	BS Optometry
Admission Fee	45,000/-
Tuition Fee	130,210/-
Document Verification Charges	1,000/-
Total	176,210/-

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

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

RULES FOR THE PAYMENT OF FEE

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

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

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

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

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

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

Taxes will be applied as per the FBR rules.

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

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

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

