

University of Balochistan

PROSPECTUS

MS/M.Phil/Ph.D Programs

2018

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

VICE CHANCELLOR'S MESSAGE



The University of Balochistan is the oldest and Premier University of Balochistan. Since its establishment in 1973, it has achieved heights of success in all fields, especially Science, Arts and Humanities. Having been started from only 5 teaching departments, it now, with the grace of Allah Almighty, is running 48 departments under the umbrella of 7 Faculties, 4 specialized Centers, 4 Institutes and 1 Constituent Law College. Beside these, University of Balochistan has 86 affiliated collages across the province. University of Balochistan has maintained its excellence in education, training and research in various fields of arts, Social Sciences, Business and language.

The University aims at high standards of quality education compatible with national needs and comparable to international Universities of high repute abroad. It has always attracted talented students coming from all walks of life and regions within its territorial limits and all provinces of Pakistan under exchange program and reserve seats.

The University of Balochistan recognizes an integrated and inter-disciplinary approach to synchronize and cooperative teaching among the various disciplines belonging to different faculties of constituent parts of the University under one umbrella. The Alumni of this Institution are serving at higher professional positions, research organizations, Government and development sectors and universities at home and abroad.

University of Balochistan is devoted to providing best possible facilities in terms of faculty staff, laboratories, Libraries and environment of research & development activities leading to higher degrees. I hope that the talented students will be joining the Graduates (MS/ M.Phil/ Ph.D) Degree maintaining the flag of the University high in the sky.

God bless you.

Prof. Dr.Javeid Iqbal
Vice Chancellor



Foreword

Dear Students,

Being Registrar University of Balochistan, it gives me pleasure to welcome you in the oldest and premier University of Balochistan, Quetta. Indeed it is a matter of pride and honor for us that you have chosen University of Balochistan for making your future.

Dear Students, excellence, Integrity, tolerance, and diversity are the values which add force to the university's processes and growth. Our success lies in our educational approach, personal and professional development of students. Students are free to pursue their education and co-curricular activities in a traditionally diversified educational environment. Our students are of different age groups who come from different regions and backgrounds as well as different countries of world. They bring a wide range of viewpoints, special interests, and talents to enrich our educational community.

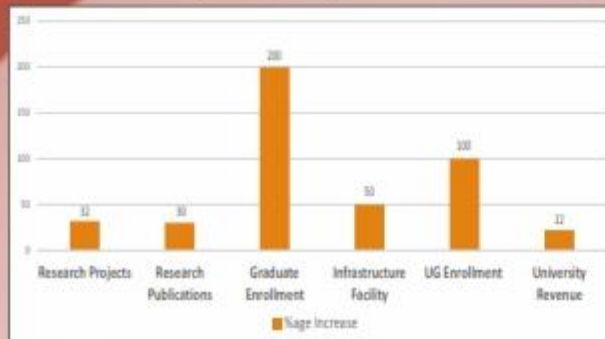
The university Registrar Office facilitates the admission process from one end to the other end. The office strictly observes the merit principle and addresses student's genuine grievances through a systematized approach to ensure timely completion of admission process in a comprehensive manner. The Registrar office appreciate comments and suggestion from all quarter for the improvement of its system to make it more efficient and delivering.

We assure you best educational and research atmosphere at University of Balochistan and hope you will come to learn and leave to serve.

Muhammad Tariq Jomezai
Registrar



Percentage increase in key indicators of higher education since 2013



Research Innovation



Innovation Summit – Balochistan



Establishment and Strengthening of Support Offices

- Office of Research Innovation & Commercialization (ORIC)
- Graduate Studies Office (GSO)
- Directorate of Distance Education (DDE)
- Faculty Training Development Centre (FTDC)
- Quality Assurance Directorate (QAD)

Key Features

Inspiration of collaboration among Industry, academia and Government	Networking with stakeholders	Achievement for system change and improvement of wellbeing	Liaison with funding agencies	creation of culture of continuous innovation
Collaboration with experts	Linkages with investors	Opportunities & Access to Quality Education on Lowest Fees	Opportunity to win innovation and technology awards	Exposure of industry problems and technologies

List of Patents

Title of Patent	Inventor	Year Issue	Name Patent Office & Country	Status
SYSTEM AND METHOD OF ANODIZED ALUMINUM OXIDE NANO-POROUS MEMBRANE PREPARATION	1. Nitiñ Atzulpurkar (Asian Institute of Technology, Thailand) 2. Ajab Khan Kasi (University of Balochistan, Pakistan)	July, 2014	US PATENT PUBLICATION No. US 2014/0202868 A1	Not Commercialized
ANODIZED ALUMINUM OXIDE TUBULAR NANO-POROUS MEMBRANE MODULE AND METHOD OF MANUFACTURE THERE OF	1. Nitiñ Atzulpurkar (Asian Institute of Technology, Thailand) 2. Ajab Khan Kasi (University of Balochistan, Pakistan)	July, 2014	US PATENT PUBLICATION No. US 2014/0202950 A1	Not Commercialized
MULTILAYER ANODIZED ALUMINUM OXIDE NANO-POROUS MEMBRANE AND METHOD OF MANUFACTURE THEREOF	1. Nitiñ Atzulpurkar (Asian Institute of Technology, Thailand) 2. Ajab Khan Kasi (University of Balochistan, Pakistan)	July, 2014	US PATENT PUBLICATION No. US 2014/0202952 A1	Not Commercialized
ANODIZED ALUMINUM OXIDE NANOPOROUS MEMBRANE INTEGRATED WITH MICRO-CHANNEL AND METHOD OF FORMATION THEREOF	1. Nitiñ Atzulpurkar (Asian Institute of Technology, Thailand) 2. Ajab Khan Kasi (University of Balochistan, Pakistan)	July, 2014	US PATENT PUBLICATION No.20140272280 A1	Not Commercialized
ANODIZED ALUMINUM OXIDE TEMPLATE ENABLED NANOSTRUCTURE FORMATION AND METHOD THEREOF	1. Nitiñ Atzulpurkar (Asian Institute of Technology, Thailand) 2. Ajab Khan Kasi (University of Balochistan, Pakistan)	July, 2014	US PATENT PUBLICATION No. 2014/0332392A1	Not Commercialized

Vaccine Production

Names of Vaccines	Sheep pox, Goat pox, PPR, Anthrax, Enterotoxemia, Black Quarter, Haemorrhagic septicemia, CCP
Average Annual Production	15 Million Doses Annually, with total production to date equal to 182.00
Production in 2016	22 Million Doses
Commercial Aspect	Average annual revenue (PKR): 3.5 Million & Revenue in 2016-17 (PKR): 30 Million
Clients	1. Major Livestock and Dairy Departments of the country 2. Food and Agriculture Organization (FAO) of UN 3. Other development organization and NGOs

List of Research Journals Published

S.No.	Name of Journal	ISSN
1	Al-Burz	2071-9477
2	TAKATOO	2075-5929
3	Balochistan Review	1810-2174
4	Pure & Applied Biology	2304-2478
5	Hanken	2070-5573
6	Pakistan Studies	2311-6803

Selected Consultancy Services 2015-16

1. Food and Agriculture Organization (FAO) of UN, Data Analyst Services for Baseline Survey, 2014-15.
2. BRSP, "Disaster Risk Reduction Training and Local Involvement" Chman City, Killa Abdullah District, May 2015.
3. ROHHNI Pakistan, District Level Training for Line Departments District Zarat, 2015.
4. BRSP, Community Based Disaster Risk Management, Nasser Abad district, 2016.
5. IUCN, Environmental Conservation in Balochistan, Quetta, IUCN office 2016.
6. UNHCR, Vulnerability Assessment in Refuge Village Killa Safullah, 2016.
7. Pakistan Reading Project (PRP), Balochistan, USAID, "To Develop Framework/Mechanism for Teacher's Certification and Licensing in Balochistan, 2016.
8. Aurat Foundation (UNDP) Funded Project on SDG-4 in perspective of Legislative/Policy Review, GAP Analysis, Balochistan, 2016.
9. Higher Education Commission (HEC), Islamabad, to Review the Performance of Universities/HEIs/DAIs in Pakistan, 2016.
10. Consultant with Pakistan Academy for Science (PAS), Islamabad to develop strategic framework for Balochistan regarding intervention of PAS, 2015.
11. Consultant with UNESCO to "Integrate Themes of Disaster in School Curriculum, 2015.

12. Socioeconomic Consultant over the year to UNICEF, UNDP, World Bank, Asian Development Bank USAID, EU, Dutch Government, and CRS etc.
13. Socioeconomic consultant to PARC, PCRWR, and Ministry of women development, P & D Department, AERC, HBFC, State Bank of Pakistan, PIDE, and Planning Commission etc.
14. "Citizen Response Card (CRC) Survey Project for Provincial Ombudsmen Office Balochistan" in collaboration with Governance Support Project of World Bank, Implementation Support Unit, GSP-ISU, Planning and Development Department, Government of Balochistan, February-April 2015.
15. "Advancing Youth Social Entrepreneurship in Higher Education Institutes Project at University of Balochistan, Quetta" in collaboration with YES Network Pakistan and USAID, October-December 2015.
16. Balochistan Rural Support Programme for capacity building of community Livestock Workers, 2014-2015.
17. Biological Research Center (BRC), Defense Science and Technology Organization (DESTO) in establishment of laboratories and procedures for handling of biological, 2016-2017.
18. Food and Agriculture Organization (FAO) of UN FAO for improvement of vaccines and disease control in Balochistan, 2014-2016.

Smart Campus Facilities:

S.No.	Description	Remarks
1	F.M. Service	Covering whole Quetta city
2	Wi-Fi Coverage	Main Campus
3	TV Studio	Newly established with latest equipment
4	Digital Library & Licensed Software Access	Access to over 500,000 books, Microsoft Licensed Software, Certified trainers through high speed HEC PERN Link

Available Transportation Facility

S.No.	Description	Quantity
1	Buses	16
2	Coaster	09
3	Van	05
4	Ambulance	1
5	Cars	04

Enrollment 2017

Summary:	Male	Female	Total
PhD	55	17	72
M.Phil/ MS	696	275	971
Bachelor Degree Program:	4185	1070	5255
Master Degree Program:	4730	1425	6155
Grant Total:	9666	2787	12453

Research Publications HEC Recognized only



Research Project Grants National Donor



Engineering & Development Projects

Description	On Going	Completed	Coast (in millions)
Construction of Academic Blocks	01	04	543.335
Construction of Support Facilities	04	06	454.519
Renovation	-	03	120.2
		Total	1118.054

Internal Funding

To propel internal funding UoB has launched UBRF. **UBRF an Enabling Agent**



Achievements



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UNIVERSITY OF BALOCHISTAN

➤ **Introduction**

Establishment of the University of Balochistan synchronized with the emergence of Balochistan as a province of Pakistan. The University came into being with the promulgation of the University of Balochistan Ordinance 1970. Located in a developing region of a developing country, the University has a challenging frame of reference for its functioning. Balochistan is passing through a process of rapid socio-economic development and needs well qualified and competent scientists, professionals, academicians and administrators. The University is cognizant of this need and prepared to provide meaningful higher education to the youth of the province.

The University is committed to develop and sustain an environment conducive to excellence in teaching, learning, research and spread of knowledge. In keeping with the priorities of higher education, the university offers its resources and talent for enrichment and enhancement of quality of life standard through its programs of research and innovations.

The University offers graduate, postgraduate, doctoral and advanced programs of studies in Basic Sciences, Management Business and IT, Life Science, Earth and Environmental Sciences, Education and Humanities, Social Sciences and in Literature and Languages Professional Disciplines. BS four years program of studies in certain disciplines of science are also offered by the University. Besides, University faculty and students organize and conduct community services for the well being of the people, provide leadership in all walks of life, develop potential of the students, channelize energies of the youth and strive for reducing the social and cultural differences through knowledge.

➤ **Vision**

To be a model public University providing affordable, quality, higher education opportunities to develop the potentially rich human resource in Balochistan through knowledge-centered teaching and research while maintaining and fostering a high levels of ethical and professional standards and promoting national identity.

➤ **Mission**

Functioning as a student-centric institution dedicated to academic excellence, tolerance and fairness. Maintaining and fostering highest ethical and professional values while teaching students to seek knowledge analytically, be creative, communicate effectively and become technologically literate to meet the emerging needs of our society within the global village. Ensuring and supporting faculty and staff to continue their professional and intellectual development

➤ **Our Values**

- Integrity
- Creativity
- Team Work
- Excellence
- Responsibility (to all Stakeholders)

➤ **Governance**

- The Governor of Balochistan is the Chancellor of the University. The University Senate chaired by the Chancellor, is the Supreme Governing/ Legislative Body of the University.

- The Vice Chancellor is the Chief Executive of the University. He chairs the Syndicate, the Executive Body of the University, and all other statutory bodies.

➤ **Administration**

- Chancellor
- Vice Chancellor
- Registrar
- Treasurer
- Controller of Examinations
- Director General (Student Affair)
- Director General (P&D)
- Director General (E&W)
- Director General (Administration)
- Director, Quality Assurance Directorate (QAD)
- Director, Office of Research Innovation & Commercialization (ORIC)
- Chairman, Graduate Studies Office (GSO)
- Chairman, FTDC

➤ **Programs of Study**

- BS : 4-5 years
- MA/M.Sc : 2 years
- M.Phil/MS: 1.5 – 2 years
- Ph.D : 3 – 5 years

➤ **Graduate Studies Office**

Worthy Vice Chancellor /Chairman, AS&RB, Prof. Dr. Javeid Iqbal in 101st meeting of Advance Studies & Research Board (AS&RB) held on 1st & 2nd December, 2015 at item No. 11, proposed to establish the Graduate Studies Office (GSO), which was approved by the Academic Council in its 74th meeting held on 19th August 2016. Subsequently, higher statutory bodies including the Syndicate and Senate also endorsed to establish GSO at University of Balochistan, Quetta.

As per the Vice Chancellor's vision for Higher Education at University of Balochistan, Graduate Studies Office is established with the aim to coordinate and administer the applications, admissions and registrations of MS/MPhil/PhD scholars. Furthermore, office also aims to monitor the teaching and learning of MS/MPhil/PhD programs and scholars-related matters of an administrative nature. Now, GSO provides the full range of administrative support services and expert, reliable advice on all matters of post-graduate level studies, from prior to entry through to graduation. In keeping with the view of University's mission, GSO strives to ensure that the administrative and academic elements of scholar's studies and to offer them highest quality of services and by best practice. GSO supports the development of innovative methods of teaching & learning, research, scholarship, academic administration, guidance and support in order to guarantee the highest quality of education to its graduate's across the University.

*Acknowledgement: GSO acknowledge ORIC for the designing of UoB progress report.

**Errors & omissions are accepted in the contents of courses & others.

REGULATIONS FOR M.PHIL/MS PROGRAM OF STUDIES

In pursuance of Section 27 (1) and 28 (1) (c) and (d) of the University of Balochistan Act-1996 and Rules framed by HEC, the following Regulations are prescribed to govern the matters relating to M.Phil/MS degree program.

These Regulations shall be called the University of Balochistan M.Phil/MS Regulations-2014.

These Regulations shall apply to the research scholars admitted in post-graduate Departments/ Centers / Institutes of the University of Balochistan.

1. PREAMBLES TO M.PHIL/MS PROGRAMME OF STUDIES:

- 1.1 HEC Rules and Regulations will be followed in letter and spirit approved by the Statutory Bodies of this University.
- 1.2 Sixteen years of schooling or 4-years education after F.A. /F.Sc. (minimum 130 credit hours) in the respective subject from HEC recognized institutions is a prerequisite for admission to M.Phil/MS program. Foreign degrees equivalent to BS/BE/M.A/M.Sc. /MCS/B.Sc. (Hons.) is also accepted for admission in M.Phil/MS.
- 1.3 Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A./M.Sc. in Annual System is required for admission to M.Phil/MS. .
- 1.4 All faculty Deans and Departmental Chairmen/Chairpersons/Directors will develop their Entry Test in respective Department/Center/Institute for applicants.
- 1.5 The entry tests & interviews for admission to M.Phil/MS program of studies will be conducted through Departmental Admission Committee (DAC). Each faculty of the University of Balochistan is responsible to sort and verify documents, and suitability of the applicants.
- 1.6 If applicant is a government servant, he/she needs to produce N.O.C., from the concerned department along with the study leave, where required (outside Quetta City).
- 1.7 The duration of M.Phil/MS degree program will span over 18 to 24 months, i.e., 4 semesters.
- 1.8 The M.Phil/MS degree program comprises of 30 credits hours with 24 credit hours of course work and 06 credit hours of research work (thesis).
- 1.9 The course work of 24 credit hours, spread over two semesters, needs to be completed during the first year of studies by each scholar, while 06 credit hours of research work/thesis spread over one or two semesters of the second/last year of the studies.
- 1.10 The number of M.Phil/MS scholars under the supervision of a dPhD Supervisor will be 8-10 at a time. However, extra scholars may be accepted with the consent of Supervisor.
- 1.11 Every concerned Department/Center/Institute is responsible to design core and elective courses on semester system and get approval through proper channel.
- 1.12 75% attendance is mandatory for appearing in semesters' examinations for course work semesters.

- 1.13 Scholar will submit thesis along with one research paper published or accepted in any recognized journals of HEC from thesis.
- 1.14 A plagiarism test report of thesis is necessary through Quality Assurance Directorate, University of Balochistan and must be submitted along with the submission of thesis.
- 1.15 M.Phil/MS thesis will be evaluated by one External Examiner (from within Country) and an Internal Examiner (Supervisor).
- 1.16 In case of the adverse remarks by the External Examiners, the thesis will be sent (after making necessary improvements) to other Examiner whose evaluation will be considered as final.
- 1.17 Meet all other pre and post requirements of University of Balochistan or HEC.

2. DEFINITIONS:

- 2.1. In these Regulations, unless the context requires, following expressions shall have the meanings hereby assigned to them, respectively:
“University” means the University of Balochistan, Quetta.
- 2.2. “M.Phil/MS” stands for Master of Philosophy/Master of Science.
- 2.3. “Board” means Advanced Studies and Research Board as constituted under section 5(1) of the 2011 Statutes of the University Act-1996 (as amended).
- 2.4. “Departmental Admission Committee”, means a Committee constituted by the Competent Authority for M.Phil/MS and Ph.D. admission.
- 2.5. “Supervisor” means a Supervisor appointed for a research scholar.
- 2.6. “Research Scholar” means a scholar enrolled in M.Phil/MS degree program.
- 2.7. “Examiners” means the Examiners as appointed as per these Regulations.
- 2.8. “Thesis” means a thesis report encompassing original research performed by a scholar.
- 2.9. “Head” means Chairman/Chairperson of Department or Director of Center or Institute, or Principal of the constituent college.
- 2.10. “Related Subjects” means subject(s) conducted by institution other than the one in which the scholar is enrolled.
- 2.11. “Institution” means a Department, Center, college or an Institute of the University.
- 2.12. “Center” means a Center on the Campus Affiliated with the University.
- 2.13. “Secretary” means Registrar of the University.

All other terms and expressions shall have the same meanings as assigned to them under schedule Section-2 of the University of Balochistan Act - 1996 or explained in these Regulations.

3. DURATION OF PROGRAM AND SEMESTERS

- 3.1. The M.Phil/MS program shall extend over a period of at least two years or four semesters.
- 3.2. There shall be two semesters in a year, i.e., Fall and Spring, where each semester shall consist of 18 weeks including examinations.

- 3.3. A Credit hour of a theory/lecture is of sixty minutes (60) duration (including 10 minutes break) per week during a Semester. However, in case of project/laboratory/research/project work, one credit hour may require two to three contact hours per week during a semester.
- 3.4. Course work of 24 credit hours in the core and elective subjects.
- 3.5. Research/Thesis work of six credit hours on a research topic approved by the Advanced Studies and Research Board.
- 3.6. Course load on a scholar during a semester shall not be more than 12 credit hours.

4. **ADMISSION PROCEDURE**

- 4.1. Admission in M.Phil/MS programs shall be announced /advertised by the Registrar, University of Balochistan as per policy.
- 4.2. Applications on prescribed forms must be submitted by the candidate in Departments/Centers/Institutes for admission offering M.Phil/MS.
- 4.3. Candidates having minimum sixteen years of education or four years education after F.A./F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions are eligible for admission in M.Phil/MS.
- 4.4. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- 4.5. Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- 4.6. M.Phil/MS degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.
- 4.7. The entry tests & interviews for admission to M.Phil/MS program of studies will be conducted through Departmental Admission Committee (DAC). Each faculty of the University of Balochistan is responsible to sort and verify documents, and the suitability of the applicants. However, admission will be encouraged to promote higher studies and research at the University of Balochistan, with existing and manageable resources (human capital and infrastructure).

*The entry test conducted by the National Testing Service/ECT/GRE or subject test conducted by the University of Balochistan with a minimum 50% cumulative score will be required at the time of admission to M.Phil/MS.
- 4.8. Selection shall be made based on cumulative merit determined from previous academic degree(s)/certificate(s) CGPA/average (semester system/annual system), and marks obtained in the written entry test with following weights.

- i Academic Qualifications: 70%
- ii Entry test: 30% The weightage distribution for academic qualifications shall be based on the following table.

Degree/Certificate	Weight	Annual System	Semester System (CGPA based)
BS/BE/BBA/B.Sc. (Hons.)/M.A., M.Sc. (16-years academic qualification)	50%	(P¹-45) x 0.36+30	CGPA/4*50
Intermediate (F.Sc/F.A/A-Levels) for applicants applying with BS/BBA/BE/B.Sc. (Hons.) OR B.Sc./B.A. (14-years academic qualification) for applicants applying with M.Sc./MCS/M.A. (16-years academic degree)	20%	(P¹-45) x 0.15+12	CGPA/4*20
Entry Test	30%	--	--

1:P represents the obtained percentage in the respective academic qualification. Final approval for admission/registration of candidates will be considered from the date on which Advanced Studies & Research Board (AS&RB) meeting is held.

5. DEPARTMENTAL ADMISSION COMMITTEE:

- 5.1. There shall be a Departmental Admission Committee (DAC) for a period of three years appointed by the concerned faculty Dean on the recommendations of the concerned Chairperson/Director of the Department/Center/ Institution.
- 5.2. The DAC shall be Chaired by the Head of the Institute/Department/Center and shall consist of two members, who are senior faculty members where at least one member preferably is a Ph.D., degree holder.

6. FUNCTIONS OF THE DEPARTMENTAL ADMISSION COMMITTEE:

- 6.1. To process the applications received for admission by the Chairman/ Chairperson/Director.
- 6.2. To propose a Supervisor after completion of course work for each scholar with his/her consultations with the approval of the Board.
- 6.3. Tabulated results should be submitted within two weeks after the semester terminal examination to the Controller of Examinations/Registrar. To manage, suggest core and elective courses needed to be offered in each semester of the course work.
- 6.4. The DAC shall meet at least twice in a semester to discuss the matters of concern.
- 6.5. To process and submit list of supervisors, topics for each scholar successfully completed course work through Dean and Registrar to the Board of Advance Studies and Research for approval.
- 6.6. To monitor smooth running of M.Phil/MS program and to submit a progress report of each enrolled/registered scholar at the end of each semester to the Registrar through faculty Dean.
- 6.7. To perform overall MS/M.Phil., program management and monitoring.

7. PROCEDURES- SEMESTER-COURSES

- 7.1. There should be at least one relevant full time Ph.D. faculty member in a Department/Center/Institute to launch M.Phil/MS study program.
- 7.2. Faculty members having M.Phil/MS degree shall be eligible to teach M.Phil/ MS courses.
- 7.3. The pool of full time Ph.D. faculty members will be developed from various Departments with the goal to promote and advance meaningful and applied research at the University.
- 7.4. Inter-disciplinary course work and research at the institutional level, especially if human resource capital or infrastructure facilities are not available, will also be encouraged at the University.
- 7.5. For the award of M.Phil/MS degree, candidates will need to complete a minimum of 24 credit hours' semester courses comprising of core and elective courses as per requirements of the discipline along with a minimum of 06 credit hours of research work and thesis, along with all pre-requisites.
- 7.6. Chairpersons/ Directors are requested to start first semester within 10 days after completion of admission process by the University.
- 7.7. Second semester shall start within a week after termination of First Semester Examinations.
- 7.8. A scholar shall be allowed to appear in examination provided that he/she has been on the role of the University during that semester, has registered himself for the courses of study within specific period of time and has attended at least 75% of lectures, laboratory work and field work.
- 7.9. The duration of M.Phil/MS program of study is two years. After expiry of period, the registration of the scholar will stand cancelled by the Registrar office through AS&RB.
- 7.10. If in case of any incident occurred with scholar medically or other reasons; on the request of scholar; his/her semester/s may be frozen/deferred by University authorities after scrutinizing his/her request on genuine grounds of the incident occurred. Maximum allowed period in this case is two semesters.
- 7.11. Meet all other pre and post requirements of University of Balochistan/HEC.

8. COURSE WORK EVALUATION:

- 8.1. The distribution of marks in a course are given in the table below:

Type of Assessment	Courses with Lab	Courses without lab
Quizzes	5%	15%
Mid Semester Exam	20%	30%
Assignments/Reports	10%	15%
Practical	25%	-
Terminal Exam	40%	40%

- 8.2. **Grade Point (GP):**

A numeric score for a course on the scale of 04 measuring the academic performance of a student. The obtained percentage marks will be mapped to grade point using following table;

Percentage Marks	Grade Point	Percentage Marks	Grade Point	Percentage Marks	Grade Point
Grade D (50 – 54% Marks)					
50	1.00	51	1.10	52	1.20
53	1.30	54	1.40		
Grade C (55- 60% Marks)					
55	1.50	56	1.60	57	1.70
58	1.80	59	1.90	60	2.00
Grade C+ (61- 64 % Marks)					
61	2.10	62	2.20	63	2.20
64	2.30				
Grade B (65-74% Marks)					
65	2.40	66	2.50	67	2.50
68	2.60	69	2.70		
70	2.80	71	2.80	72	2.90
73	2.90	74	3.00		
Grade B+ (75-79 % Marks)					
75	3.10	76	3.10	77	3.20
78	3.20	79	3.30		
Grade A (80—84 % Marks)					
80	3.40	81	3.50	82	3.60
83	3.75	84	3.90		
Grade A+ (85 % Marks and above)					
85-100	4.00				

8.3. **Grade Point Average of a Semester (GPA):**

The grade point average of a semester will be calculated by the following formula

$$GPA = \frac{\sum_{i=1}^{No. of courses} (GP_i \times Credit Hours_i)}{Total Number of Credit Hours in the Semester}$$

where GP_i and $Credit Hours_i$ represent the grade point and credit hours of the i th subject, respectively.

8.4. **Cumulative Grade Point Average (CGPA):** CGPA for a program for all courses attended during the program of studies will be calculated in similar fashion using the same formula shown above in Section 8.3.

8.5. **Grade:** A letter representing the scholar's academic performance in a course. The letter grades and their equivalent numerical marks, and GP are given in the following table.

Mark Range	Grade Point	Grade
85 and above	4.00	A+
80-84	3.70	A
75-79	3.30	B+
65-74	3.00	B

61-64	2.30	C+
55-60	2.00	C
50-54	1.00	D
0-49	0.00	F

9. SEMESTER EXAMINATIONS AND ACADEMIC STANDARDS

- 9.1. Chairperson/Director shall establish an Examination Cell, if does not exist, in their respective institute/department/center for the examination purpose.
- 9.2. Chairperson/Director will appoint a coordinator among faculty members who will look into all related matters / material for examinations /problems of the examinations in consultancy of Chairperson/Director and respective faculty Dean.
- 9.3. Supporting staff request will be sent to Registrar by Chairperson/Director as per requirement of the smooth running of the M.Phil/MS study program.
- 9.4. Subject teacher/s will be responsible for preparing quizzes, assignments, projects and fieldwork study for their respective teaching subject as per subject's requirement.
- 9.5. Subject teacher is also responsible for paper setting, marking and award list preparation for semester examinations such as mid-term and terminal of their respective subjects.
- 9.6. A scholar must secure minimum CGPA of 2.50 in the course work semesters to qualify for registering thesis/research credits.
- 9.7. During the course work semester(s), a scholar must maintain minimum 2.50 GPA/CGPA in order to promote to the next semester. Any scholar with a GPA/CGPA less than 2.00 will be dropped from the roll of the University. However, only one chance shall be given to re-appear in the additional/extra examination.
- 9.8. The department is responsible to schedule/arrange additional/extra examination within 30 days of the declaration of results. All scholars appearing in the additional/extra examination shall register themselves in the repeating courses by submitting re-appear form with a fee of Rs.2500/= per course.
- 9.9. A scholar with GPA/CGPA in between 2.00 and 2.50 will be put on probation for one semester. In case that the next semester is a course work semester, the scholar will qualify for registering thesis credits only if he/she can improve his/her CGPA to 2.50. In case that the scholar has completed the course work, he/she will request to re-appear in maximum three least graded courses in additional/extra examination.
- 9.10. There shall be only one chance for the improvement of CGPA in additional/extra examination with maximum three least graded courses.
- 9.11. Any scholar appearing in the additional/extra examination for the purpose to clear an F grade in a course or to improve his/her CGPA, he/she shall repeat all assignments, quizzes, project/field work/presentation, mid-term and terminal examinations.
- 9.12. The maximum achievable GP in each repeating course through additional/extra examination shall be 3.00.

- 9.13. A final result of both semesters will be announced by the Coordinator with consultancy of Chairperson/Director and respective faculty Dean; copy of result shall also be provided to controller of examination and registrar.
- 9.14. Chairperson/Director is requested to send name/s of dropout scholar/s to the Registrar office and to Chairman of Advanced Studies & Research Board to cancel the registration of the scholar.
- 9.15. Scholars completing course work in both Semesters with minimum CGPA of 2.50 will be allowed to start Research Work.

10. RESEARCH SUPERVISOR:

- 10.1. The Research Supervisor will be a faculty member having a Ph.D. degree in the relevant field, publications to his / her credit. He/she shall be responsible for the guidance and supervision of research by the scholar during the period of his/her research work. In special circumstances there could be a Co-Supervisor who shall also have Ph.D. degree in the relevant field.
- 10.2. In teaching Department/Centers/ Institutes a Research Supervisor will not have more than ten (10) M.Phil/MS scholar/s at a time. However, extra scholars may be accepted with consent of Supervisor.
- 10.3. A scholar must choose a Research Supervisor within two weeks after the completion of his/her course work.

11. SYNOPSIS

- 11.1. The scholar will prepare a synopsis (or research proposal) for the research study containing the background; methodology and feasibility of study in term of availability of source materials with the assistance of the Research Supervisor within three to four weeks after the completion of course work.
- 11.2. The Synopsis must be submitted through DAC to check and scrutinize the research topic. The synopsis with recommendations of the Research Supervisor and DAC shall submit for final approval to the AS&RB.
- 11.3. Guideline for writing Synopsis is as per GSO website.

12. RESEARCH RULES

- 12.1. Scholars shall choose their Research Supervisor s not later than the first 2 weeks of the 3rd Semester.
- 12.2. Research Supervisor must be from the parent Department or from University of Balochistan.
- 12.3. The title of the thesis which may be changed during the 3rd semester (1st semester of research/thesis work), however, in the case of any changes in the title after the first approval from AS&RB there shall be a single opportunity for second approval through the recommendations of Research Supervisor and DAC. The scholar/s will not be able to change their thesis title after 3rd semester.

- 12.4. A plagiarism test for M.Phil/MS thesis is required through Quality Assurance Directorate, University of Balochistan; report must be submitted along with the submission of thesis.

13 THESIS

- 13.1 A scholar has to submit a thesis based on original research work. Plagiarism Test Report will be conducted on thesis before its submission to the Internal, External Evaluators within country.
- 13.2 The scholar has to submit one research paper from thesis, which may be published in any category (W,X,Y,Z) of HEC recognized Research Journals or Full fill following criteria; (I) For Local/National Journal: (a) The Research Journal shall be at least single blind per review journal. (b) The Research Journal shall have International Editorial Board with at least two members from Technologically/ academically/ industrially advanced Country. (II) For International Journal: (a) The Research Journal shall have online archive. (b) The Research Journal shall be at least single blind peer review journal. (c) The Research Journal shall have International Editorial Board with at least two members from Technologically/academically/industrially advanced Country. (d) The Research Journal shall be indexed/abstracted by a reputed Agency/database with coverage of 1000 journals except Google scholar & citeceer.
- 13.3 The scholar shall submit four copies of thesis to the Research Supervisor type set as per University thesis report guidelines.
- 13.4 On completion of the research study, the candidate shall submit thesis to the Registrar through the Supervisor, Chairperson/Director and Faculty Dean along with the evidence of completion of all pre-requisites that include:
- 1) A certificate from the Controller of Examinations stating the completion of course work credits with CGPA.
 - 2) Copy of research paper with letter of acceptance
 - 3) Fee receipts of all paid dues.
- 13.5. The thesis shall include a signed certificate by the candidate that he/she has prepared and written thesis himself/herself and that this thesis has not been submitted at any other University. The certificate will be counter signed by the Research Supervisor.
- 13.6. The thesis shall be evaluated by one Internal Examiner (the Research Supervisor) and one External Examiner having a Ph.D. degree from HEC recognized University in the related area of research.
- 13.7. The Research Supervisor will propose a panel of at least three experts as External Examiners for thesis evaluation or viva voce examination and will forward the same to the Controller of Examinations in a sealed cover. The Vice Chancellor will nominate two examiners from the panel of examiners.
- 13.8. The Registrar after completing necessary formalities shall send four copies of the thesis to the Controller of Examinations who shall forward copies of the thesis to examiners for evaluation. After receiving the evaluation reports; the Controller of Examinations shall forward them to the Registrar. The Registrar shall provide a copy of the evaluation report

to the concerned scholar and Research Supervisor for incorporating comments/suggestions/objections in the thesis.

- 13.9. The response to the remarks of the External Evaluators and copy of the modified thesis with the recommendations of the Research Supervisor and DAC shall be submitted to the Advanced Studies and Research Board through Registrar for final decision.
- 13.10. On the recommendations of the Advanced Studies & Research Board; Controller of Examinations shall arrange an oral examination with consultancy of Chairperson/Director, Research Supervisor and Faculty Dean. The Oral examination shall be conducted by the Internal and External Examiner in the presence of DAC. The DAC, External Examiner and Supervisor will furnish a collective report on the thesis along with marks obtained for 06 credit hours in research and 200 marks annually. The report shall be sent to AS&RB and to the Controller of Examinations.
- 13.11. In case, the External Examiner proposes revision of whole or a part of the thesis with the condition of re-submission of the revised thesis with the recommendation of degree, the revised thesis shall be re-submitted to the respective External Examiner following the same procedure defined for submission of thesis.
- 13.12. In case, the External Examiner proposes some revision without the condition of re-submission of thesis and recommend the award of the degree, article 16.8 shall be followed to get approval of oral examination from the AS&RB.
- 13.13. In case, the External Examiner does not recommend award of the degree, the Advance Studies & Research Board shall decide to send thesis to second examiner, if second examiner does not recommend the award of the degree or fail to send the report within 8 weeks then the thesis will be rejected along with the rejection of registration of the candidate.
- 13.14. In case, the second External Examiners does not recommend award of the degree, the thesis will be rejected along with the rejection of registration of the candidate.
- 13.15. If a scholar fails to defend his thesis in the oral examination in the second attempt, shall be allowed in accordance with the prescribed procedure
- 13.16. If a scholar fails to defend his/her thesis in the oral examination in the second attempt, his/her registration shall stand cancelled.
- 13.17. Reports of viva voce when received shall be forwarded by the Controller of Examinations, in original sealed cover to the Registrar for presentation to the AS&RB. If the reports are satisfactory and the scholar passes the aforesaid oral examination, AS&RB shall approve the declaration of the result with effect from the date of approval of AS&RB.
- 13.18. Decision for the award of M.Phil/MS degree shall be communicated to the Controller of Examinations, who will issue the provisional certificate.
- 13.19. Academic Council and the Syndicate will approve award of degree in routine as per University rules.
- 13.20. Guideline for writing the thesis is as per GSO Website.

14. CREDIT TRANSFER AND MIGRATION

- 14.1. Inter-university transfer and migration is allowed. A scholar enrolled in MS/ M.Phil/ PhD in any HEC recognized universities may request for credit transfer and migration to this university by submitting an application with said subject to the Registrar office.
- 14.2. The request shall only be entertained if candidate will provide a detail transcript of course work from Controller of Examinations and no objection certificate (NOC) from Registrar of Parent University, mentioning that candidate is allowed for credit transfer and migration to University of Balochistan.
- 14.3. After scrutiny, the Registrar office shall forward the case to the concerned Departmental Admission Committee (DAC)/faculty dean for formal evaluation and credit accreditation as per requirement of the concerned department.
- 14.4. The DAC shall evaluate the request of credits transfer and migration on the basis of credit gained and accreditation of credits as per approved course work credits (i.e. core credits and elective credits) of University of Balochistan.
- 14.5. The DAC shall furnish a detailed report (within 10 days of receipt of request) on accreditation of core and elective course credits with recommendation on the acceptance of credit transfer and migration from specific semester.
- 14.6. The report shall be forwarded to Registrar office for further action as per rule and submit in the AS&RB.
- 14.7. After approval from AS&RB, the Registrar office shall provide the original documents to the candidate and documentary record will be deposited in the migration record of University of Balochistan.
- 14.8. Migrant student once took migration from University of Balochistan will not be considered as student of this University. After issuing of migration certificate he/she will not reserve the right to continue his/her studies at UoB.

15. SEMESTER FREEZE

- 15.1. For reason of sickness or any other incident on the request of scholar; his/her semester/s can be frozen by Authorities of University, after scrutinizing his/her request on genuine grounds of the incident occurred.
- 15.2. Students enrolled in the first semester cannot apply to freeze his semester. Only those students who have completed their first semester of the study may avail this facility.
- 15.3. Students absent without formal approval of deferment will be suspended, and may be subsequently dismissed.
- 15.4. Maximum allowed period in this case is two semesters.
- 15.5. Maximum study period in this case will remain same.
- 15.6. A student who wants to freeze his/her semester must forward the case through Departmental Admission Committee (DAC), concerned, Faculty Dean & Dean
- 15.7. Research, approximately 15-20 days before midterm examination. After Midterm examination his/her semester cannot be frozen.
- 15.8. Case will be placed in AS& RB meeting for approval/rejection.

- 15.9. In case of approval of AS&RB for a semester freeze, a student will have to pay 30% of the semester tuition fee as a "semester freeze fee". In case of non-payment, student will not be allowed to freeze the semester.
- 15.10. In case of one semester deferment he/she may join continuing semester within 10 days. The deferred semester he/she may join later when offered, failure to join may be considered as "Withdrawn".
- 15.11. In case, a student wants to withdraw his/her application from semester freeze, the missed semester which he/she by mistake may withdraw the request within seven (07) days from date of application.

REGULATIONS FOR Ph.D PROGRAM OF STUDIES

1. PREAMBLES TO Ph.D. PROGRAM OF STUDIES:

- 1.1. HEC Rules and Regulations will be followed in letter and spirit.
- 1.2. All of the faculty Deans/Departmental Chairmen/Chairpersons will develop their Entry Tests in their respective Faculties/Departments/Centers/Institutes for the applicants.
- 1.3. On-Service applicants will produce an N.O.C., lien/deputation; leave documents along with their study leave.
- 1.4. Weightage will be given to course work that is of 18 credit hours for Ph.D. in one year.
- 1.5. Ph.D. scholars are bound to complete two (02) years research within the prescribed period.
- 1.6. Scholar will submit his/her thesis along with one research paper published or accepted in any of the HEC recognized Journals (Category W,X,Y) or in any Impact Factor Journal from his/her thesis. Listed below are the criteria for research publications accepted by the University for the Award of Ph.D. degree in various fields:
 - i. For Physical and Natural Sciences: One research paper in any Impact Factor or “W” Category HEC recognized journal(s) which must be published/accepted from thesis.
 - ii. For Social Sciences, Literature and Linguistics: One research paper in “Y” Category HEC recognized journal(s) which must be published/ accepted from thesis.
- 1.7. The assessment tests & interviews for admission in Ph.D. program of studies will be conducted through Departmental Admission Committee (DAC). DAC will sort the applicants; verify their documents in order to ensure the suitability of the candidates to pursue their higher degrees.
- 1.8. For pursuing a Ph.D. degree, M.Phil/MS degree with 30 credit hours in the relevant subject is a prerequisite from any recognized University. In case of foreign degree, it will be ascertained that it is equivalent to Pakistani M.Phil/ MS degree from any recognized University / Institution.
- 1.9. A Research Supervisor can enroll up to Five (05) Ph.D. candidates. This number may increase to Eight (08) candidates with subject to a prior approval from HEC.
- 1.10. The core and elective courses will be designed by each Department/ Center / Institute by keeping in view the rules of the semester system.
- 1.11. For the award of Ph.D. degree, a course work of at least 18 credit hours; followed by a Comprehensive Examination and open thesis defense, after positive evaluation by at least two foreign experts from technologically advanced countries will be essential.
- 1.12. 75% attendance is mandatory for appearing in semester’s examinations. This also applies for research work, Lab Work and Field Work in Ph.D.
- 1.13. A plagiarism test of Ph.D. thesis is essential through Quality Assurance Directorate, University of Balochistan.
- 1.14. Ph.D. dissertation must be evaluated by at least two foreign experts from technologically advanced countries and from one examiner within the parent country i.e. Pakistan.

1.15. Meet all other pre and post requirements of the University of Balochistan and HEC.

2. SHORT TITLE, COMMENCEMENT AND APPLICATION:

2.1. These Regulations shall be called the University of Balochistan Ph.D. Regulations.

2.2. These regulations shall apply to research scholars admitted in a post-graduate Department/Center/ Institute of the University of Balochistan.

3. SCHEME OF STUDIES:

The scheme of studies for Ph.D. shall be as under:

3.1. Course Work in the major subject/s, in which the scholar is registered.

3.2. Course Work in subject/s related to the major subject/s.

3.3. Comprehensive Oral Examination after completion of course work is mandatory and will be conducted in consultation with proposed Supervisor, Chairman/ Director and respective Faculty Dean.

3.4. The Research Topic along with synopsis is to be approved by the Advanced Studies & Research Board.

4. DURATION OF COURSE AND SEMESTERS:

4.1. Ph.D. Program shall extend over a period of Three (03) to a maximum of Five (05) years.

4.2. There shall be two semesters in a year i.e., fall and spring; each spanning over a duration of Eighteen (18) weeks including examinations.

5. ADMISSION PROCEDURE:

5.1. Admissions in Ph.D. program shall be advertised by the Registrar-University of Balochistan as per policy.

5.2. Applications on prescribed forms for Ph.D. program will be submitted by the candidates in their respective Departments /Centers for Admissions in different subjects announced by the University.

5.3. For pursuing a Ph.D. degree, a 30 credit hours M.Phil/MS degree with first division or CGPA of 3.00 on a scale of 4.00 or overall 60% marks in annual system or equivalent in the relevant subject is a prerequisite from any recognized University. In case of foreign degree, it will be ascertained that it is equivalent to Pakistani M.Phil/ MS degree from any recognized University/Institution.

5.4. Ph.D. degree program will be open for all candidates/incumbents meeting the admission criteria. However, serving candidates will have to submit an N.O.C from their respective departments with the application form. A study leave document from their respective employer for a period of three years has to be submitted at the time of registration. The candidate will be a full time regular student for three years to cover the course work and the research.

5.5. Selection of a candidate shall be made on the basis of cumulative merit that will be determined by reviewing the candidate's previous academic records, written test and interview. The allocation of marks will be as follows:

Academic Qualification:	70%
Aptitude & proficiency test	20%
Interview	10%

5.6. Selection shall be made on the basis of cumulative merit determined from previous academic degree(s)/certificate(s) CGPA/average (semester system/annual system), and marks obtained in the written entry test with following weights.

- i. Academic Qualifications: 70%
- ii. Entry test: 30%

5.7. The weight distribution for academic qualifications shall be based on the following table.

Degree/Certificate	Weight	Annual System	Semester System (CGPA based)
MS/M.Phil (18-years academic qualification)	50%	$(P^2-45) \times 0.36+30$	CGPA/4*50
BS/BE/BBA/B.Sc. (Hons.)/M.A., M.Sc. (16-years academic qualification)	20%	$(P^1-45) \times 0.36$	CGPA/4*20
Entry Test	30%	--	--

P represents the obtained percentage in the respective academic qualification

5.8. Final approval for admission/registration of candidates will be considered from the date on which Advanced Studies & Research Board meeting is held.

6. DEPARTMENTAL ADMISSION COMMITTEE:

6.1. A Departmental Admission Committee shall be constituted in each Department/Center/Institute of the university for a period of three years on the recommendation of the head of department whose members will be appointed by the Vice-Chancellor and it shall consist of:

6.2. Head of the Institution concerned as ex-officio convener.

6.3. Two senior-most teachers of the Institution, out of whom, at least one shall preferably be a Ph.D. degree holder.

6.4. If found necessary, one or two external experts may also be nominated by the Dean on the recommendations of the concerned Head.

7. FUNCTIONS OF THE DEPARTMENTAL ADMISSION COMMITTEE:

7.1. To process the applications received for admission by the Head.

7.2. A scholar can choose a Supervisor with the consultation of DAC and the same be sent for final approval by the Board.

7.3. To submit an advance copy of the tabulated result on prescribed Proforma for transcript (As Per Annexure) showing courses taken, teacher, time, duration, detailed marks, subject-wise, aggregate and grade. This would be duly authenticated by the concerned Dean/Head for the declaration of result.

7.4. Tabulated results should be submitted within two weeks nearing the end of the semester to the Chairperson/ Director.

8. PROCEDURES: SEMESTER/COURSES:

8.1. Ph.D. Degree program of the University comprises of course work and research.

8.2. Ph.D. admission shall be announced once a year by the Registrar's Office.

8.3. There should be at least three (03) relevant full-time Ph.D. Faculty members in a Department/Center/Institute to launch the Ph.D. program of study.

8.4. Faculty members having Ph.D. degrees will be eligible to teach the Ph.D. courses.

8.5. Research at the Ph.D. level will be launched by gathering or pooling full time Ph.D. faculty members from any other department of the University, whenever and wherever, human capital and infrastructure facilities are not available; especially, in faculties of Social Sciences and in general for faculties of other disciplines like literature and languages. Inter-disciplinary course work and research/program at the institutional level will be encouraged at the University of Balochistan in order to promote and advance meaningful research with emphasis on applications.

8.6. For the award of Ph.D. degree, candidates need to complete a minimum of 18 credit hours of semester courses that comprises of 02 core subjects and one elective subject for each semester along with a minimum of 24 credit hours for research work/thesis.

8.7. Each Department / Center / Institute will design the core and elective courses by keeping in mind the semester system.

8.8. Courses of 18 credit hours shall be completed during the first year of Ph.D degree program that will be covered in two (02) semesters.

8.9. Chairman/Chairpersons/Directors will be bound to commence the first semester course within the 10 days after completion of registration process by University.

8.10. Second semester will start after the declaration of result (within 15 days) of first semester.

8.11. Chairmen/Chairpersons/Directors and faculty Deans will ensure and monitor the smooth running of Ph.D. course work classes and submit their reports on monthly basis to the Vice Chancellor and Registrar of the University.

8.12. A scholar shall be allowed appearing in the semester examinations if he/she has been on the rolls of the University during that specific semester, has registered him/her for the courses of study within specific period, and has attended at least 75% of Lectures / Laboratory work.

8.13. A Comprehensive Examination will be conducted by the Semester Cell, in consultation with the concerned Chairperson, Dean and Supervisor on fixed dates at the end of second semester.

8.14. The duration of Ph.D. program of study is 03 to 05 years. After expiry of this time, the registration of the scholar shall stand cancelled by the Registrar office via AS&RB.

8.15. Meet all stipulated Requirements of University of Balochistan and HEC.

9. PROPORTIONAL WEIGHTAGE OF EXAMS/ASSIGNMENTS:

9.1. The distribution of marks in a course given in the table below:

Type of Assessment	Courses with Lab	Courses without lab
Quizzes	5%	15%
Mid Semester Exam	20%	30%
Assignments/Reports	10%	15%
Practical	25%	-
Terminal Exam	40%	40%

9.2. Grade Point (GP):

A numeric score for a course on the scale of 4 measuring the academic performance of a student. The obtained percentage marks will be mapped to grade point using following table.

Percentage Marks	Grade Point	Percentage Marks	Grade Point	Percentage Marks	Grade Point
Grade D (50 – 54% Marks)					
50	1.00	51	1.10	52	1.20
53	1.30	54	1.40		
Grade C (55- 60% Marks)					
55	1.50	56	1.60	57	1.70
58	1.80	59	1.90	60	2.00
Grade C+ (61- 64 % Marks)					
61	2.10	62	2.20	63	2.20
64	2.30				
Grade B (65-74% Marks)					
65	2.40	66	2.50	67	2.50
68	2.60	69	2.70		
70	2.80	71	2.80	72	2.90
73	2.90	74	3.00		
Grade B+ (75-79 % Marks)					
75	3.10	76	3.10	77	3.20
78	3.20	79	3.30		
Grade A (80-84 % Marks)					
80	3.40	81	3.50	82	3.60
83	3.75	84	3.90		
Grade A+ (85 % Marks and above)					
85-100	4.00				

9.3. Grade Point Average of a Semester (GPA):

The grade point average of a semester will be calculated by the following formula

$$GPA = \frac{\sum_{i=1}^{\text{No. of courses}} (GP_i \times \text{CreditHours}_i)}{\text{Total Number of Credit Hours in the Semester}}$$

Where represent the grade point and credit hours of the i^{th} subject, respectively.

Cumulative Grade Point Average (CGPA): CGPA for a program for all courses attended during the program of studies will be calculated in similar fashion using the same formula shown above in Section 9.3.

9.4. Grade:

A letter is representing the scholar's academic performance in a course. The letter grades and their equivalent numerical marks, and GP are given in the following table.

Mark Range	Grade Point	Grade
85 and above	4.00	A+
80-84	3.70	A
75-79	3.30	B+
65-74	3.00	B
61-64	2.30	C+
55-60	2.00	C
50-54	1.00	D
0-49	0.00	F

10. SEMESTER EXAMINATIONS/ACADEMIC STANDARDS/ CREDIT TRANSFER AND MIGRATION POLICY:

- 10.1. Director/Chairperson shall establish an Examination Cell, if does not exist, in their respective institute/department/center for the examination purpose.
- 10.2. Chairperson/ Director will appoint a Coordinator among faculty members who will look after all related matters / material for examinations / problems of the examinations in consultancy with the Director/Chairperson and respective faculty Dean.
- 10.3. Supporting staff request will be sent to Registrar by Director/Chairperson as per requirement of the smooth running of the Ph.D. program of Studies.
- 10.4. Subject teacher/s will be responsible for preparing quizzes, assignments, projects and fieldwork study for their respective teaching subject as per subject's requirement.
- 10.5. Subject teacher is also responsible for paper setting, marking and award list preparation for semester examinations such as mid-term and terminal of their respective subjects.
- 10.6. A scholar must secure minimum CGPA of 3.00/4.00 in the course work semesters to qualify for registering thesis/research credits.
- 10.7. During the course work semester(s), a scholar must maintain minimum 3.00 GPA/CGPA in order to promote to the next semester. Any scholar with a GPA/CGPA less than 2.50 will be dropped from the roll of the University. However, only one chance shall be given to re-appear in the additional/extra examination.
- 10.8. The department is responsible to schedule/arrange additional/extra examination within 30 days of the declaration of results. All scholars appearing in the additional / extra examination shall register themselves in the repeating courses by submitting re-appear form with a fee of Rs.10000/= per course.

- 10.9. A scholar with GPA/CGPA in between 2.50 and 3.00 will be put on probation for one semester. In case that the next semester is a course work semester, the scholar will qualify for registering thesis credits only if he/she can improve his/her CGPA to 3.00. In case that the scholar has completed the course work, he/she will request to re-appear in maximum three least graded courses in an additional / extra examination. There shall be only one chance for the improvement of CGPA in an additional / extra examination with maximum three least graded courses.
- 10.10. Any scholar appearing in the additional / extra examination for the purpose to clear an F grade in a course or to improve his/her CGPA, he/she shall repeat all assignments, quizzes, project/field work/presentation, mid-term and terminal examinations.
- 10.11. The maximum achievable GP in each repeating course through additional/extra examination shall be 3.50.
- 10.12. The Coordinator with the consultancy of Chairperson/Director will announce result of both semesters with consent of respective faculty Dean. The same result will be forwarded to Controller of Examinations and Registrar's office.
- 10.13. Chairperson/Director is bound to send name/s of dropped out scholar/s to the Registrar's office and to Chairman of Advanced Studies & Research Board to cancel the registration of the scholar.
- 10.14. Scholars completing course work with minimum CGPA of 3.00 will be allowed to appear in an Oral/Written comprehensive examination. External Examiner must be part of the Comprehensive Examination either in Viva or Written.

11. RESEARCH SUPERVISOR:

- 11.1. The Research Supervisor will be a person having a Ph.D degree in the relevant field, experience and publications to his/ her credit. He/ she shall be responsible for the guidance and supervision of course work and research of the scholar during the period of his/ her registration. In special circumstances, there could be Co-Supervisor who shall also have a Ph.D degree in the relevant field.
- 11.2. Supervisor must be from the concerned department or University of Balochistan.
- 11.3. A Research Supervisor can enroll upto Five (05) Ph.D candidates. This number may increase to Eight (08) candidates with subject to a prior approval from HEC.

12. SYNOPSIS:

- 12.1. The scholar will prepare a synopsis for the research study which must contain the background, methodology and feasibility of study in terms of availability of resource materials, bibliographic with the consultation/guidance of his/her Research Supervisor.
- 12.2. Synopsis must be submitted during the first 2 weeks of the 3rd Semester through the DAC to scrutinize the research topic and that synopsis of scholar will be sent to the AS&RB, with the recommendations of the DAC, for final approval.

13. RESEARCH RULES:

- 13.1. A Departmental Admission Committee (DAC) will be formed consisting of 03 members including the Research Supervisor who have research background.

- 13.2. During the first 2 weeks of the 3rd Semester, scholars will search & choose their supervisor. This procedure must be finalized by the end of third week.
- 13.3. Extension period for writing Synopsis/pre-defense & final defense is two months maximum and this relaxation may be given once for each defense.
- 13.4. Title of thesis may change with the recommendation of the DAC before the Synopsis / proposal defense by the end of 3rd semester. After the Proposal defense, scholars will not be allowed to change their thesis title.
- 13.5. Thesis will be sent through the Deans, Registrar and AS&RB for evaluations to:
 - a. Two (02) foreign experts of Technologically Advanced Countries;
 - b. One External Evaluator within the country and;
 - c. An Internal Examiner.
- 13.6. Names of External Examiners for thesis evaluation and viva voce examination will be approved by the Vice Chancellor. Final reports will be sent to AS&RB.
- 13.7. Synopsis/Proposal defense will be taken before the constituted DAC committee at the end of 4th semester.
- 13.8. For the Synopsis/proposal defense and final defense of Ph.D. scholars, following participants may be invited DAC members, Chairman of the department, Dean of faculty, Registrar, Chairman AS&RB. Final defense will be open to public participation.

14. PLAGIARISM TEST:

- 14.1. A plagiarism test of Ph.D. thesis is essential which will be conducted through Quality Assurance Directorate of the University before the final submission of thesis.

15. THESIS:

- 15.1. On completion of the research work, the candidate shall submit his/her thesis to the Registrar Office through the concerned Chairman/Chairperson/Director and Dean Faculty. An application on prescribed form has to be submitted for possible thesis evaluation. He/she must pay the prescribed fees and attach a copy of the payment receipt with the application form.
- 15.2. The Registrar office, after the scrutiny of the application and that of the payment of all prescribed fees and dues, shall issue a clearance certificate in this regard.
- 15.3. The candidate shall submit to the Research Supervisor six copies of the thesis abstract of (400-500 words) and six copies of the thesis in hard bound form, completed in all aspects, and confirming the required specification of the prescribed format. The thesis shall be typed on A-4 size (210 mm x 297 mm or 8.27 inches x 11.69 inches) white paper with font size 12 (Times New Roman, Normal Setting) and 1.5 spacing. There should be a margin of 1.5 inches on the binding edge while remaining sides' margin should be of 1.0inch.
- 15.4. Title of the thesis should be on the top cover and the year with Ph.D. with name of the scholar on the spine of the thesis.
- 15.5. The Research Supervisor after certifying that the work was completed under his/her supervision shall forward the copies of thesis to the Registrar. The Registrar after

completing necessary formalities shall pass the same to the Controller of Examinations for onward perusal of the Examiners. The Controller of Examinations shall retain one copy of the thesis.

- 15.6. Four examiners, one of whom shall be the Research Supervisor (as the internal examiner), one external examiner from Pakistan and two external examiners from academically/technologically advanced countries shall evaluate the thesis. The Vice Chancellor will nominate the examiners.
- 15.7. After obtaining the written consent of the concerned examiners, the Controller of Examinations shall forward a copy of thesis to each examiner for evaluation. When reports from all the examiners will be received, it shall be forwarded in the original sealed covers to the Registrar, who shall place them before the AS&RB.
- 15.8. When the thesis examiners recommend the award of the degree to the candidate, the AS&RB shall direct the Controller of Examinations to arrange the Viva Voce examinations of the candidate that shall be conducted by the internal and external examiners from Pakistan, in the presence of Vice Chancellor / Pro-Vice Chancellor or their nominees, respective Dean, supervisor. They will give collective reports on the thesis and Viva Voce for the award of Ph.D. degree.
- 15.9. If one of the External examiners proposes revision of whole or a part of the thesis i.e. major changes, then the same External Examiner shall evaluate the revised thesis when it is re-submitted. The revised thesis has to be submitted within the period of six months from the date of relevant notification. Only one chance for re-submission of thesis shall be allowed. The procedure pertaining to the submission and evaluation of the thesis given in above article shall also apply to the revised thesis.
- 15.10. In case, where the examiners recommend the award of the degree but indicate some errors in the thesis or advise some changes, the candidate shall rectify the necessary corrections/changes. The viva voce examination will be held after the receipt of a certificate from the Research Supervisor duly endorsed by Chairperson and relevant Faculty Dean that all the necessary corrections/changes have been made in the thesis.
- 15.11. If one of the two external examiners recommend the thesis for the award of Ph.D. degree and the other gives an adverse report, a fourth examiner shall be appointed and the opinion of the fourth Examiner shall be final. However, if the Examiner who has given the adverse report is a foreign Examiner, the fourth Examiner shall also be a foreigner. Same procedure will be adopted in case of adverse report from Pakistani Examiners.
- 15.12. In case both the external examiners from abroad do not recommend the award of the degree, the AS&RB shall communicate rejection of the thesis and the registration of the candidate shall stand cancelled.
- 15.13. In case the thesis examiners recommend only up to M.Phil standard, for the thesis submitted for Ph.D., the AS&RB may recommend the award of M.Phil degree to the candidate provided that he/she successfully defends the thesis during the Viva Voce examination. This will apply to those candidates who do not hold an M.Phil /MS degree.
- 15.14. The Controller of Examinations will notify the date of open defense, viva voce examinations of Ph.D. candidates.

- 15.15. The Controller of Examinations in the original sealed covers shall forward reports of Viva Voce examiners to the Registrar for placement in the AS&RB. If the reports are satisfactory, the candidates pass the aforesaid viva voce examinations and approved by the AS&RB then their result shall be declared with effect from the date of approval from the AS&RB.
- 15.16. Decisions for the award of Ph.D. degrees shall be communicated to the Controller of Examinations in order to issue the provisional certificates to the scholars. Scholars will be responsible to provide a final soft and hard copy of their thesis, in addition to the already submitted copies of the thesis, for the record of HEC's library.
- 15.17. The candidates will be eligible for benefits of the said degree with effect from the date of the approval from the AS&RB.
- 15.18. Academic Council and the Syndicate will approve award of degree in routine as per University rules.
- 15.19. When the Syndicate has finally confirmed the award of the degree, the copy of the thesis retained by the Controller of Examinations shall be deposited in the University Library and a copy (both soft and hard form) of the thesis shall be sent to HEC.

16. CREDIT TRANSFER AND MIGRATION

- 16.1. A scholar enrolled in Ph.D. in any HEC recognized universities may request for credit transfer and migration to this University by submitting an application with said subject to the Registrar office.
- 16.2. The request shall accompanied with certificate of course work credit gained from Controller of Examinations of the parent University, no objection certificate from the Registrar of the parent University stating that the scholar is allowed for consideration of possible credit transfer and migration to this University.
- 16.3. The Registrar office, after making scrutiny of the request and other necessary procedures, forwards the case to the concerned departments DAC through faculty dean and chairperson of DAC for formal evaluation and credit accreditation as per requirements of the concerned department.
- 16.4. The DAC shall evaluate the case for possible number of credits transfer and migration by considering scholar's number of credits gained and possible accreditation of those credits as per approved course work credits of this University in both categories, i.e., core credits and elective credits.
- 16.5. The DAC shall then furnish a detailed report (within 10 days of the receipt of the case) on accredited core and elective credits with a recommendation of number of credit transfer and migration with suggested semester and courses for the migrant.
- 16.6. The report shall be forwarded to Registrar office for further action as per rules.
- 16.7. The Registrar office shall provide the original documents along with original migration certificate to the scholar and keep photocopy of all documents in the record of University.

17. SEMESTER FREEZE

- 17.1. For reason of sickness or any other incident on the request of scholar; his/her semester/s can be frozen by Authorities of University, after scrutinizing his/her request on genuine grounds of the incident occurred.
- 17.2. Students enrolled in the first semester cannot apply to freeze his semester. Only those students who have completed their first semester of the study may avail this facility.
- 17.3. Students absent without formal approval of deferment will be suspended, and may be subsequently dismissed.
- 17.4. Maximum allowed period in this case is two semesters.
- 17.5. Maximum study period in this case will remain same.
- 17.6. A student who wants to freeze his/her semester must forward the case through Departmental Admission Committee (DAC), concerned, Faculty Dean & Dean
- 17.7. Research, approximately 15-20 days before midterm examination. After Midterm examination his/her semester cannot be frozen.
- 17.8. Case will be placed in AS& RB meeting for approval/rejection.
- 17.9. In case of approval of AS&RB for a semester freeze, a student will have to pay 30% of the semester tuition fee as a "semester freeze fee". In case of non-payment, student will not be allowed to freeze the semester.
- 17.10. In case of one semester deferment he/she may join continuing semester within 10 days. The deferred semester he/she may join later when offered, failure to join may be considered as "Withdrawn".
- 17.11. In case, a student wants to withdraw his/her application from semester freeze, the missed semester which he/she by mistake may withdraw the request within seven (07) days from date of application.

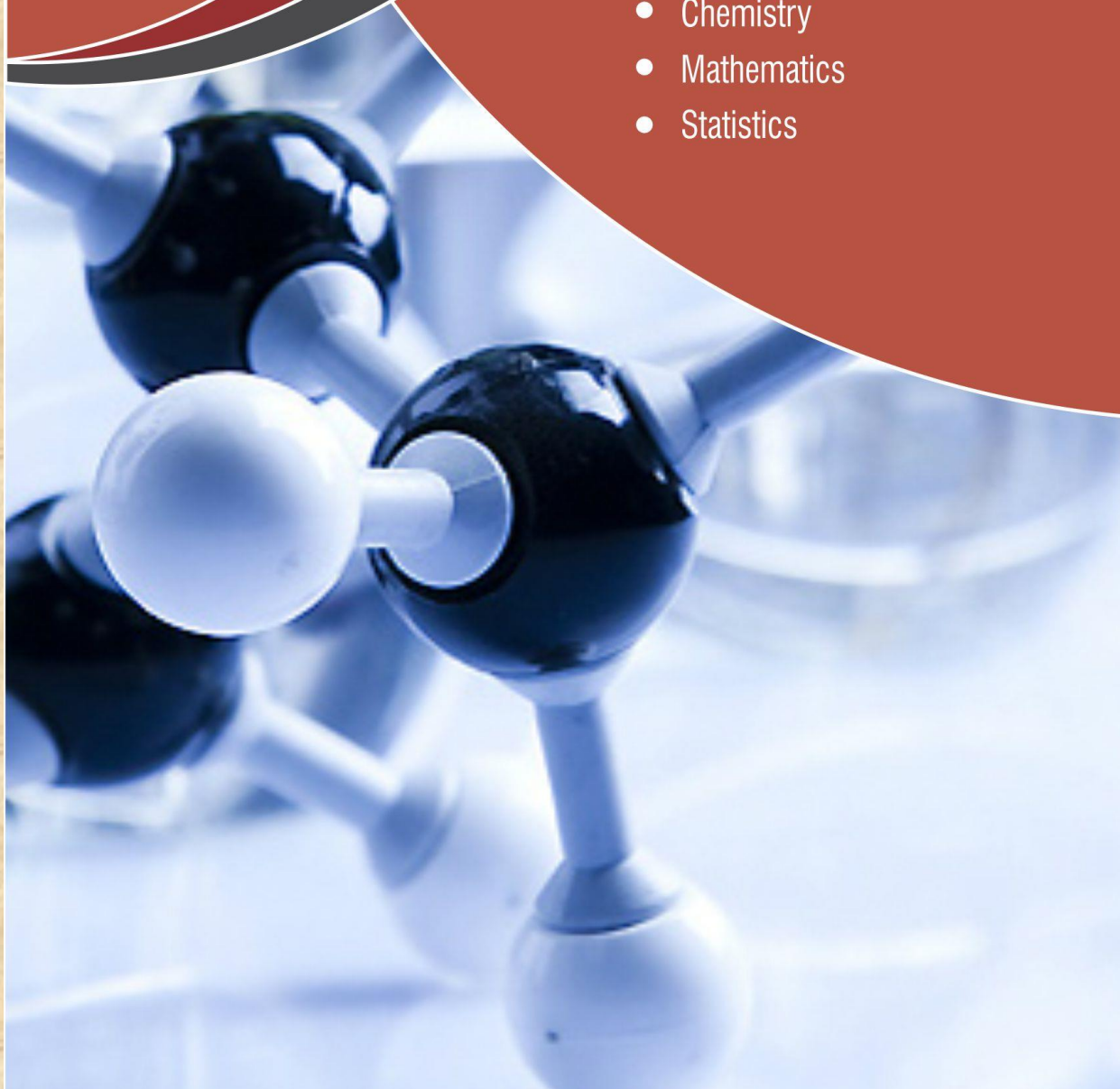
Respectable Deans

S.#	Name	Designation
1	Prof. Dr. Akhtar Mohammad Kasi	Dean Research, Faculty of Science
2	Prof. Dr. Malik Muhammad Tariq	Dean Research, Faculty of Arts
3	Prof. Dr. Masood Ahmed Siddiqui	Dean, Faculty of Basic Sciences
4	Prof. Dr. Muddasir Asrar	Dean, Faculty of Life Sciences
5	Prof. Dr. Iftikhar Ahmed	Dean, Faculty of Earth & Environmental Sciences
6	Prof. Dr. Abdul Ali Achakzai	Dean, Faculty of Edu: & Humanities
7	Prof. Dr. Nadeem Malik	Dean, Faculty of Management Sciences, Business & IT
8	Prof. Dr. Naheed Anjum Chisti	Dean, Faculty of Social Sciences
9	Prof. Dr. Faria Saeed Khan	Dean, Faculty of Literature & Lang:
10	Dr. Shafi Muhammad	Dean, Faculty of Pharmacy & Health Sciences



Faculty of Basic Sciences

- Physics
- Chemistry
- Mathematics
- Statistics





DEPARTMENT OF PHYSICS

Introduction

- Physics is a fundamental science which exerts a vital and dominant role in the development of other scientific disciplines. Physics has also a direct impact on society and economy because the present civilization is strongly influenced by science and technology. Physics has always an asset of technologically advanced countries. Physics bred the technologies and new sciences of the past and till to date, is breeding new technologies and sciences.
- The Department of Physics is one of the three pioneering science departments, which was introduced since inception of the University of Balochistan, Quetta in 1971. In the first batch ten students were enrolled for a two year M.Sc. degree course with four teaching staff members. A three years B.Sc. (Honours) course was also introduced in 1976 which was later abolished in 1992. Over a span of forty-five years the department has expanded manifolds and has produced thousands young masters in Physics.
- The department of Physics emphasizes the researchers in physics of nanotechnology, communication system; condense matter physics, and modeling and simulation. The graduates of this department are not only working in prestigious institutes/ organizations/ universities of Pakistan but are also serving as faculty members of foreign universities. Apart from regular programs of MSc in physics, the department has also initiated regular M.Phil and PhD programs in 2014.

Objectives

- To prepare qualified and focused professionals in the subject of Physics to meet the future needs of educational institutes and industry in public and private sectors.
- To prepare researchers to meet the emerging needs of industry and research organizations and to develop the department as a centre of excellence in Physics teaching and research in the province of Balochistan.

Job Opportunities

- Pakistan Atomic Energy Commission (PAEC),
- KRL,
- SUPARCO,
- CENAR,
- PNRA,
- Geological survey of Pakistan,
- IT based Services,
- Various industries dealing in Scientific and Electronic equipments,
- Provincial and Federal Schools,
- Colleges, Universities, and Research Institutes, Multinational companies.

Faculty Members

S No.	Name	Designation	Qualification
1	Dr. Ajab Khan Kasi	Associate Professor/ Chairperson	PhD
2	Mr. Muhammad Latif	Assistant Professor	M.Phil
3	Mr. Shahab Naseem	Assistant Professor	M.Phil
4	Syed Abdul Sattar Agha	Assistant Professor	M.Phil
5	Dr. Jafar Khan Kasi	Assistant Professor	Ph.D
6	Dr. Syed Muzamil Bokhari	Assistant Professor	Ph.D
7	Dr. Muhammad Sohail	Assistant Professor	Ph.D
8	Mr. Syed Wajahat Ali	Lecturer	M.Phil
9	Mr. Ahmed Bilal	Lecturer	M.Phil
10	Mr. Shehzad Ahmed	Lecturer	M.Phil
11	Ms. Iram Naz	Lecturer	M.Phil
12	Ms. Sana Idress	Lecturer	M.Phil
13	Mr. Samiullah	Lecturer	PhD

Programs

- M.Phil in Physics by approved criteria of HEC (courses detail available on UOB website).
- PhD in Physics by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil

COMPULSORY COURSES:

SNo.	Course Code	Course Title	Credit Hours
1	Phy-701	Research Methodology	3
2	Phy-702	Mathematical Methods of Physics	3
3	Phy-703	Electromagnetic Theory	3
4	Phy-704	Self-Organized Nanostructures	3
5	Phy-705	Microelectronics Fabrication Technology	3
6	Phy-706	Sensing and Actuation	3
7	Phy-707	Signals and System Analysis	3
8	Phy-708	Telecommunication networks	3
9	Phy-709	Experimental Techniques	3
10	Phy-710	Nanoscience and Nanotechnology	3
11	Phy-711	Solid State Physics	3

OPTIONAL COURSES:

SNo.	Course Code	Course Title	Credit Hours
1	Phy-712	Semiconductor Physics	3
2	Phy-713	Computational Physics	3
3	Phy-714	Advanced Quantum Mechanics	3
4	Phy-715	Medical Physics	3
5	Phy-716	Methods and Techniques of Experimental Physics	3
6	Phy-717	Surface Physics	3
7	Phy-718	Optical Fiber Communication	3
8	Phy-719	Cellular mobile system	3
9	Phy-720	Renewable Energy Resources	3
10	Phy-721	Digital and Analog Circuit Design	3
11	Phy-722	Digital Integrated Circuit Design	3
12	Phy-723	Plasma Physics-I	3
13	Phy-724	Template Assisted Synthesis	3
14	Phy-725	Microcontroller	3

COMPULSORY COURSES

SNo.	Course Code	Course Title	Credit Hours
1	Phy-801	Condensed Matter Physics	3
2	Phy-802	Micro-Electro Mechanical Systems and Nano-Electro Mechanical Systems	3
3	Phy-803	Nanomaterials and Nanotechnology	3
4	Phy-804	Characterization of Solid Surfaces	3
5	Phy-805	Metal Oxide Nanostructures	3
6	Phy-806	Advance Signal Processing	3

OPTIONAL COURSES

SNo.	Course Code	Course Title	Credit Hours
1	Phy-807	Quantum field theory	3
2	Phy-809	Artificial neural networks	3
3	Phy-810	Quantum Optics	3
4	Phy-804	Advanced Optical Techniques	3
5	Phy-811	Atmospheric Dynamics & Modeling	3
6	Phy-812	Quantum Theory of Solids	3
7	Phy-813	Electron Microscopy	3
8	Phy-814	Superconductivity	3
9	Phy-815	Biophysical techniques and Instrumentation	3
10	Phy-816	Radiation Physics	3
11	Phy-817	Microwave communication	3
12	Phy-818	Satellite Communication System	3
13	Phy-819	Microprocessor	3
14	Phy-820	Optoelectronics Materials and Devices	3
15	Phy-821	Plasma Physics-II	3
16	Phy-822	Experimental Plasma Physics	3
17	Phy- 823	Optical Networks	3
18	Phy- 824	Nanostructured device Fabrication	3

TOUGHT COURSES DURING SESSION 2016-2017

S.No	Course Code	Course Title	Credit Hours
First Semester			
1	Phy-804	Characterization of Solid Surfaces	3
2	Phy-805	Metal Oxide Nanostructures	3
3	Phy-818	Satellite Communication System	3
Second Semester			
4	Phy-802	Micro-Electro Mechanical Systems and Nano-Electro Mechanical Systems	3
5	Phy-803	Nanomaterials and Nanotechnology	3
6	Phy-824	Nanostructured device Fabrication	3

Facilities

- **Departmental Library:** The departmental Library is managed by a qualified librarian and has over 2000 books covering a wide range of disciplines in Physics. These books are in addition to more than 2500 titles of Physics books stocked in central library of University.
- **Computer Lab:** The department of Physics has a full furnished computer lab which has internet services and access to digital library where thousands of journals, proceedings, online books, and magazines are available.
- **Basic Electronics Lab:** This lab is for M.Phil & Ph.D students to perform their practical work of analog electronics. This lab is equipped with oscilloscopes, wave generators, millimeters, power supplies, electronics trainers, amplifier ICs, oscillators, bipolar transistors, field effect transistors, diodes, and other electronic components.
- **Digital Electronics Lab:** This lab is for M.Phil & Ph.D students to perform their practical work of digital electronics. This lab is equipped with number of digital electronics trainers which has

facilities to power digital ICs and monitor their outputs with corresponding inputs. Digital Electronics Lab has wide variety of digital ICs including logic gates, flip flops, counters, and memories.

- **Nuclear Lab:** This lab is for M.Phil & Ph.D students to perform their practical work of Nuclear Physics. This lab is equipped with number of nuclear radiation detectors, counters and radiation sources.
- **Physical Constants Lab:** This Lab is for MSc, M.Phil and PhD students to perform their practical, and research work. The Physical Constants Lab has wide variety of equipments including Millikan's oil drop apparatus, Fine Beam tube apparatus for (e/m) of electron, Foucault-Michelson's apparatus for speed of light measurement, Photo cell for Planck's constant, spectrometers, Cauchy's constant apparatus, Michelson interferometer, Franck-Hertz experiment apparatus, Zeeman Effect apparatus, Compton Effect apparatus and X-Ray Diffraction system.
- **Communications System Lab:** This Lab is for MSc, M.Phil and PhD students to perform their practical and research work. The communication system lab has wide variety of equipments including frequency modulation, amplitude modulation, phase modulation, pulse width modulation trainers, amplifiers, analog to digital and digital to analog convertors, transmitters, receivers, FPGA, visible light communication tools, oscilloscopes, wave generators and optical fiber trainers. Numbers of software packages are there to program devices in this lab.
- **Microprocessor Lab:** The Microprocessor Lab is for MSc, M.Phil and PhD students to perform their practical, and research work. This lab has number of practical facilities including 80386, 8086, 8088, 8085 microprocessor trainers, serial and parallel interfacing trainers, analog to digital and digital to analog convertors and computer interfacing trainers.
- **Mechatronics Lab:** This Lab is for MSc, M.Phil and PhD students to perform their practical, and research work. The mechatronics lab has wide variety of equipment including sensors, actuators, automation tools, programmable devices and robots. Numbers of software packages are there to program devices in this lab.
- **Nanotechnology Lab:** Nanotechnology Lab is for MPhil/PhD scholars and teaching faculty to perform their research work. Main facilities of this lab are nanoporous membrane fabrication machine, electro-polishing setup, electroplating setup, hydrothermal setup for ZnO growth, Autoclave, Oven, furnaces, vacuum pumps, range hood, hotplate stirrers, digital balance, optical microscope, sonicators, and desiccators etc. This lab has a stock of variety of chemicals and pure materials. With above facilities this lab is functional for several projects including, fabrication of anodic aluminum oxide membrane, fabrication of titanium dioxide membrane, growth of ZnO nanostructures, carbon nanotubes, template assisted synthesis of nanorods, nanotubes, and nanodots, nanostructured device fabrication including solar cells, nanogenerators, sensors and microfluidics.
- **Microfabrication Lab:** This lab provides facilities for fabrication of microdevices such as microfluidic devices, microactuators, microsensors, and microgenerators. Main facilities in this lab are: photolithography setup, magnetron plasma sputter, thermal evaporator, spin coater, vacuum degassing setup, and chemical etcher etc.
- **Characterization Lab:** This is research lab for MPhil/PhD scholars and teaching faculty to perform their research work. The characterization lab is providing facilities in variety of fields in Physics. The main function of this lab is to provide facilities for different types of measurements and detections with high accuracy. This lab is equipped with electrometers, LRC meters, nuclear detectors, resistivity measuring equipment, dielectrics constant measuring equipment, magnetic flux generators and measuring tools, sensitive amplifiers, digital analyzer, oscilloscopes, spectrometers and data acquisition tools.

DEPARTMENT OF CHEMISTRY

Introduction

- All materials and living things consist of atoms and molecules. Chemistry is the study of these atoms and molecules and how they interact with each other and the role they play in living things. Detailed knowledge of the subject is essential for entry to many interesting and challenging careers. Chemists are creative and can discover new substances, which can have a range of applications such as medicine that fight disease (e.g. aspirin, penicillin), or as materials that are very important in everyday life (e.g. PVC, Teflon, rechargeable batteries, superconductors and fuel cell materials). Chemists in Universities and research organizations work on the discovery of new medicines, new devices and materials and on advancing our knowledge of the World. Those in industry are involved in the production and analysis of chemicals. Chemists can work with engineers and business people to turn discoveries into commercially valuable products.
- The Department of Chemistry started functioning with the establishment of the University in 1971 with Dr Aijaz. A. Malik as Head of the Department. Two specializations, Organic chemistry and Inorganic chemistry were offered to students then. At that time the students were sent to the University of Sindh for performing laboratory work as the laboratories in the department were in the process of development. The first batch graduated in 1973.
- The Department has expanded now. Specialization in Physical Chemistry was started in 1977, Bio-Chemistry section was established in 1982 and Analytical Chemistry was started in 1984. In 2005 the department introduced Environmental Chemistry as the 4th compulsory subject in M.Sc Final.

Objectives

- To develop conducive environment for learning and research that will foster cadres of qualified and focused professionals for chemical industries, research organizations and educational institutions of Pakistan.
- To establish linkages between the Department and the local industries and solve their technical problems.
- To prepare students for the local, national and global market by enhancing their international knowledge and developing the social confidence and adoptability they need to operate internationally.

Job/Career Opportunities

- Educational Institutes, Colleges and Universities.
- Pharmaceutical Industry.
- Pakistan Agriculture Research Council (PARC), Atomic Energy Commission.
- Public / Private Research Organizations.

Faculty Members

S#	Name	Designation	Qualification
1	Dr. Masood Ahmed Siddiqui	Professor/ Dean	Ph.D
2	Dr. Manzoor Iqbal Khattak	Professor/ Chairperson	Ph.D
3	Dr. Mohammad Yaqoob	Professor	Ph.D
4	Dr. Nizam-ud-Din Baloch	Professor	Ph.D
5	Dr. Naqeebullah	Lecturer	Ph.D
6	Dr. Samar Ali	Assistant Professor	Ph.D
7	Ms. Amna Bano	Assistant Professor	M.Phil
8	Dr. Samiullah	Assistant Professor	Ph.D
9	Mr. Waheed Ahmed Shah	Assistant Professor	M.Phil
10	Mr. Ghulam Mustafa	Assistant Professor	M.Phil
11	Dr .Amir Wasim	Assistant Professor	Ph.D

Programs

- Scholar's for M.Phil./Ph.D. degrees has to complete the requisite number of credit hours For course work as laid down in Higher Education Commission regulations for the said degrees (courses detail available on UOB website). The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility Criteria

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- M.Phil/MS degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil

1st Semester

COMMON COURSES

S.No.	Course Code	Course Name	Credit Hours
1	CHEM-701	Molecular Spectroscopy	03
2	CHEM-702	Photochemistry	03
3	CHEM-703	Introduction of Biochemistry	03
4	CHEM-704	Inorganic Polymers	03
5	CHEM-705	Chemistry of Arsenic	03
6	CHEM-706	Chemistry of Fluoride	03
7	CHEM-707	Chemistry of Organometallics	03
8	CHEM-708	Chromatography	03
9	CHEM-709	Environmental Analysis	03
10	CHEM-710	Statistics for Chemist	03
11	CHEM-711	Quality Assurance and Quality Control	03
12	CHEM-712	Research Methodology	03

ANALYTICAL CHEMISTRY

2nd Semester

S.No.	Course Code	Course Name	Credit Hours
1	CHEMA-713	Molecular Luminescence	03
2	CHEMA-714	Atomic Emission Spectroscopy	03
3	CHEMA-715	Atomic Absorption Spectroscopy	03
4	CHEMA-716	Chromatography – I	03
5	CHEMA-717	Chromatography-II	03
6	CHEMA-718	Radio-analytical Methods of Analysis	03
7	CHEMA-719	Automated Methods of Analysis	03
8	CHEMA-720	Flow Injection Analysis	03

SPECIALIZED COURSES

S.No.	Course Code	Course Name	Credit Hours
1	CHEMB-721	Enzymes	03
2	CHEMB-722	Coenzymes and Cofactors	03
3	CHEMB-723	Metabolism-I	03
4	CHEMB-724	Metabolism-II	03
5	CHEMB-725	Immunochemistry	03
6	CHEMB-726	Clinical Biochemistry	03

INORGANIC CHEMISTRY

SPECIALIZED COURSES

S.No.	Course Code	Course Name	Credit Hours
1	CHEMI-727	Inorganic Electronic Spectroscopy	03
2	CHEMI-728	Kinetics and Mechanism of Reactions of coordination Compounds	03
3	CHEMI-729	Medicinal use of transition metals/inorganic compounds	03

4	CHEMI-730	Ionic Behavior of covalent Bond	03
5	CHEMI-731	Interhalogens and Pseudohalogens	03
6	CHEMI-732	Advances in Atomic Spectroscopy	03

**ORGANIC CHEMISTRY
SPECIALIZED COURSES**

S.No.	Course Code	Course Name	Credit Hours
1	CHEMO-733	Introduction to organic Chemistry	03
2	CHEMO-734	Advanced Stereochemistry	03
3	CHEMO-735	Reactive Intermediate in Organic Synthesis	03
4	CHEMO-736	Natural Products	03
5	CHEMO-737	Advanced Heterocyclic Chemistry	03
6	CHEMO-738	Organic Polymer Chemistry	03
7	CHEMO-739	Pericyclic Reactions	03
8	CHEMO-740	Biosynthesis of Macromolecules	03

**PHYSICAL CHEMISTRY
SPECIALIZED COURSES**

S.No.	Course Code	Course Name	Credit Hours
1	CHEMP-741	Mathematics, Statistics and Computer for Chemists	03
2	CHEMP-742	Advanced Chemical Kinetics	03
3	CHEMP-743	Chemistry of Advanced Composite Materials	03
4	CHEMP-744	Heterogeneous Catalysis	03
5	CHEMP-745	Theoretical and Computational Chemistry	03
6	CHEMP-746	Physical Chemistry of Polymers	03
7	CHEMP-747	Solution Chemistry	03
8	CHEMP-748	Surface Chemistry and Colloids	03

PhD

1st Semester

COMMON COURSES

S.No.	Course Code	Course Name	Credit Hours
1	CHEM-801	Mass Spectrometry	03
2	CHEM-802	NMR Spectrometry	03
3	CHEM-803	Atomic X-ray Spectrometry	03
4	CHEM-804	Laser Spectroscopy	03
5	CHEM-805	Chemistry of Macromolecules	03
6	CHEM-806	Thermochemistry and thermochemical energetics	03
7	CHEM-807	Advanced Applied Chemistry in Pakistan	03
8	CHEM-808	Chemicals in the environment and their impact	03

2nd Semester

ANALYTICAL CHEMISTRY

S.No.	Course Code	Course Name	Credit Hours
1	CHEMA-809	Electroanalytical techniques	03
2	CHEMA-810	Caliberation, Standardization and Blank Correction	03
3	CHEMA-811	Practical aspects of chemical analysis	03
4	CHEMA-812	Environmental Chemical Analysis	03
5	CHEMA-813	Clinical Analysis	03
6	CHEMA-814	Enzyme Purification and Immobilization	03

BIOCHEMISTRY

SPECIALIZED COURSES

S.No.	Course Code	Course Name	Credit Hours
1	CHEMB-815	Industrial Microbiology	03
2	CHEMB-816	Microbial Evolution	03
3	CHEMB-817	Molecular Biology	03
4	CHEMB-818	Genetic Engineering and Biotechnology	03
5	CHEMB-819	Recombitant DNA Biotechnology	03
6	CHEMB-820	Endocrinology	03
7	CHEMB-821	Glycoconjugates	03

INORGANIC CHEMISTRY

SPECIALIZED COURSES

S.No.	Course Code	Course Name	Credit Hours
1	CHEMI-822	Radioactivity	03
2	CHEMI-823	Main Group of Organometallic Reagents	03
3	CHEMI-824	Group Theory	03
4	CHEMI-825	Solid State Chemistry	03
5	CHEMI-826	Inorganic Chemistry of Biological Process	03
6	CHEMI-827	Magnetochemistry	03
7	CHEMI-828	Nanochemistry	03

ORGANIC CHEMISTRY

SPECIALIZED COURSES

S.No.	Course Code	Course Name	Credit Hours
1	CHEMO-829	Advance Reaction Mechanism	03
2	CHEMO-830	Modern Trends in Organic Chemistry	03
3	CHEMO-831	Fuel Chemistry	03
4	CHEMO-832	Medicinal Chemistry of Drug Development & Designing	03
5	CHEMO-833	Advanced Organic Chemistry	03

**PHYSICAL CHEMISTRY
SPECIALIZED COURSES**

S.No.	Course Code	Course Name	Credit Hours
1	CHEMP-834	Physical Aspects of Environment	03
2	CHEMP-835	Biophysical Chemistry	03
3	CHEMP-836	Chemical and Statistical Thermodynamics	03
4	CHEMP-837	Molecular Spectroscopy in Physical Chemistry	03
5	CHEMP-838	Quantum Mechanics	03
6	CHEMP-839	Radiochemistry	03
7	CHEMP-840	Solid State Physical Chemistry and Semiconductors	03
8	CHEMP-841	Advanced Electrochemistry	03

Facilities

- Five Specializations are offered by the Department of Chemistry and there are five teaching and five research Laboratories. All the laboratories are adequately equipped. The list of some of the equipment/instruments is provided below.

1	High Performance Liquid Chromatograph. (Shimadzu, Japan)
2	Gas Chromatograph. (Shimadzu, Japan)
3	Atomic Absorption Spectrometer
4	Flow injection analysis with Spectrophotometric and chemiluminescence
5	FT-IR Spectrophotometer (Shimadzu, Japan)
6	Fluorescence Spectrophotometer (Shimadzu, Japan)
7	Water Deioniser Purelab Option (ELGA, England)
8	Polymerize Chain Reactor (PCR)
9	Flame Photometer (Corning 400 Jenway, UK)
10	Ultra Sonicator
11	Photomultiplier Tubes (PMTs Thorn EMI) (NSRDB)
12	Spectrophotometer (Hitachi U - 1100) and Shimadzu UV-120
13	Ultra Centrifuge (IEC - B -02 A, DAMON)
14	Electrophoresis Unit
15	Autoclave
16	Thermo Gravimetric Analyzer / differential Thermal Analyzer
17	Gel Documentation System
18	Polarimeter (Erma)
19	Rotary evaporators with thermostats (HEIDLPH)
20	Vacuum Pump (ME4R Membrane)

21	Analytical Balance (Shimadzu BL Series)
22	Fraction Collector (Pharmacia biotech, FRAC - 100)

- **Computer Laboratory.** There is a computer laboratory having 25 PCs with internet facilities.
- **Departmental Library.** The departmental library is managed by a qualified librarian and has over 2500 books covering a wide range of disciplines in Chemistry for teaching and research purposes. These books are in addition to more than 2000 Chemistry books stocked in Central Library of the University. In 2007 about 300 books of latest addition have been purchased for the seminar library. The departmental library also has a vast collection of international research journals.
- **Internet Facility.** The internet facility is available in all laboratories, library and rooms for the teachers. A large number of international research journals are also available on Digital Library provided by Higher Education Commission and research article of interest can also be downloaded.

DEPARTMENT OF MATHEMATICS

Introduction

- Mathematics is fundamental and indispensable to a large part of modern Science and Technology. Progress in other disciplines is often linked to an increased use of Mathematics. Mathematics is however also a subject in itself and fundamental research is a necessary condition for its many applications. Mathematics is the backbone of all disciplines. It has extensive applications in Physics; engineering, economics, geography, computer science, statistics; social science and many other fields. Our aim in this department is;
- The Department of Mathematics started functioning in 1972 with a small number of students and only one regular staff member. In 1980, it emerged as a full-fledged department. The Department has now a full-fledged faculty of 15 members and is offering M.Sc., M. Phil and Ph. D in the fields of Pure and Applied Mathematics.

Objectives

- To provide a variety of courses that have been instrumental to create batches of qualified and focused professionals to meet the future needs of educational institutes or Industries.
- To develop cadres of students will have knowledge of such basic ideas as rigorous argument, formal proof and the power of formulation and solution of problems, together with deeper ideas of mathematics in which they have decided to specialize.

Job Opportunities

- Banking, Scientific and technological institutes such as SUPARCO, Atomic Energy Commission, PASTIC and Pakistan Science Foundation.
- Teaching Jobs in Colleges and Universities.

Faculty Members

S.#	Name	Designation	Qualification
1	Dr. Saleem Iqbal	Assistant Professor/ Chairperson	Ph.D.
2	Mr. Muhammad Akram	Assistant Professor	M.Phil.
3	Dr. Arbab Abdul Sattar	Assistant Professor	Ph.D
4	Mr. Israr Ahmed	Assistant Professor	M.Phil.
5	Mr. Arbab Ghulam Raza	Assistant Professor	M.Phil.
6	Mr. Habibullah	Assistant Professor	M.Phil.
7	Dr. Abdul Rehman	Assistant Professor	Ph.D.
8	Dr. Naveed Sheikh	Lecturer	Ph.D.

Programs

- M.Phil in Mathematics by approved criteria of HEC (courses detail available on UOB website).
- PhD in Mathematics by approved criteria of HEC (courses detail available on UOB website).

- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc./MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- M.Phil/MS degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil.

First Semester			
S.No.	Course Code	Course Title	Credit hours
1	Math: 708	Numerical Methods-I	3 (3-0)
2	Math:725	Advanced Integral Equations	3 (3-0)
3	Math:704	Automata Theory and Formal Languages-I	3 (3-0)
4	Math:713	Partial Differential Equations	3 (3-0)
Second Semester			
	Course Code	Course Title	Credit hours
1	Math:732	Advanced Mathematical Physics	3 (3-0)
2	Math:706	Graph Theory –I	3 (3-0)
3	Math:720	Advanced Mathematical Methods	3 (3-0)
4	Math:723	Basic Theory of Viscous Fluid	3 (3-0)
5			

Third and 4th semester
Research /Thesis work

Ph.D.

First Semester			
S.No.	Course Code	Course Title	Credit hours
1.	Math-821	Mathematical Tech: for B.V.P.	3 (3-0)
2.	Math-825	Advanced Integral Equations	3 (3-0)
3.	Math-827	Computing Tools for Mathematician	3 (3-0)
Second Semester			
4.	Math-832	Advanced Mathematical Physics	3 (3-0)
5.	Math-803	Artificial Neural Net works-I	3 (3-0)
6.	Math-823	Basic Theory of Viscous Fluid	3 (3-0)

Note: Courses may be changed in first and second semester

Facilities

- **Computer Lab:** Department has two separate Computer Labs for Male/Females students with three computers with Wi-Fi facilities more computers will also be included in the current academic year.
- **Departmental Library:** Department has about 400 books
- **Internet:** The Internet facility is available in the Computer Lab as well as in the rooms of teaching staff. A large number of Books and international research journals are also available on Digital Library provided by Higher Education Commission and research articles of interest can also be down loaded.

DEPARTMENT OF STATISTICS

Introduction

- Statistics is a fundamental science, which exerts a vital and dominant role in the development of other scientific disciplines. Statistical Science skills are important in all applied sciences (life sciences, medicine and related fields, physical sciences) and are becoming increasingly so in emerging fields that require analysis of complex data such as agriculture, business and finance. There is a constant demand for graduates with these skills in both industry and academia. Statistics also has a direct impact on society and economy besides science and technology.
- The Department of Statistics was established in March 1979. Prof. Joseph Elfenbein was the founder of the Department. Incepted with regular programs of MSc, the department has also started programs in M.Phil and Ph.D.

Objectives

- To create and develop cadres of motivated researchers, scholars and practitioners to meet the needs of agriculture, industry, research organizations and educational institutions of the local, national and international level.
- To foster an environment that promotes learning through quality teaching and research while encouraging mutual respect, tolerance and sensitivity.

Job Opportunities

- Statistics degree holders can join.
- Educational Institutions, Colleges and Universities.
- Public / Private Research Organizations, Administration, Planning and Finance
- Provincial and Federal Bureau of Statistics
- Banks/NADRA/Health and Agricultural departments
- Energy Sector

Faculty Members

S.#	Name	Designation	Qualification
1	Dr. Syed Haider Shah	Professor/ Chairperson	Ph.D.
2	Dr. Yasmin Zehra Jafri	Professor	Ph.D.
3	Dr. Farhat Iqbal	Associate Professor	Ph.D.
4	Mr. Muhammad Zaman	Assistant Professor	M.Phil.
5	Mrs. Ruqia Rehman	Assistant Professor	M.Phil.
6	Mr. Abdul Raziq	Assistant Professor	M.Phil.
7	Mr. Azhar Ali Marri	Lecturer	M.Phil.

Programs

- M.Phil in Mathematics by approved criteria of HEC (courses detail available on UOB website).

- PhD in Mathematics by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility Criteria

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc./MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- M.Phil/MS degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP:

M.Phil

Semester	Number of Courses	Credit Hours	Total Credit Hours
1 st	4	3	12
2 nd	4	3	12
3 rd + 4 th	Research Work / Thesis		06
Total Credit Hours for M.Phil Statistics			30

M.Phil

STAT-701	Theory of Estimation
STAT-702	Linear Models and Regression Analysis
STAT-703	Hypothesis Testing and Interval Estimation
STAT-704	Advanced Regression Analysis
STAT-705	Applied Multivariate Statistics
STAT-706	Time Series Analysis and Forecasting
STAT-707	Research Methods
STAT-708	Generalized Linear Models
STAT-709	Probability Theory
STAT-710	Advanced Sampling Techniques
STAT-711	Experimental Design and its Analysis
STAT-712	Financial Time Series Analysis
STAT-713	Bayesian Statistical Methods

STAT-714	Optimization Techniques
STAT-715	Bio Statistics
STAT-716	Analysis of Repeated Measures
STAT-717	Statistical Methods for Quality Control
STAT-718	Survival Data Analysis
STAT-719	Advanced Categorical Data Analysis
STAT-720	Computer Applications
STAT-721	Advanced Multivariate Analysis
STAT-722	Applied Stochastic Models
STAT-723	Inference in Stochastic Processes

Ph.D

Semester	Number of Courses	Credit Hours	Total Credit Hours
1 st	3	3	09
2 nd	3	3	09
Total Credit Hours for Ph.D. Statistics			18

Ph.D

STAT-801	Advanced Design of Experiments
STAT-802	Applied Spatial Statistics
STAT-803	Advanced Statistical Analysis Using R
STAT-804	Robust Estimation and Hypothesis Testing
STAT-805	Statistical Learning
STAT-806	Monte Carlo Methods
STAT-807	Multivariate Financial Time Series Analysis
STAT-808	Environmental Statistics
STAT-809	Applied Nonparametric Statistics
STAT-810	Artificial Neural Networks
STAT-811	Advanced Artificial Neural Networks
STAT-812	Applied Linear Statistical Models

Courses are offered subject to the availability of faculty.

Facilities

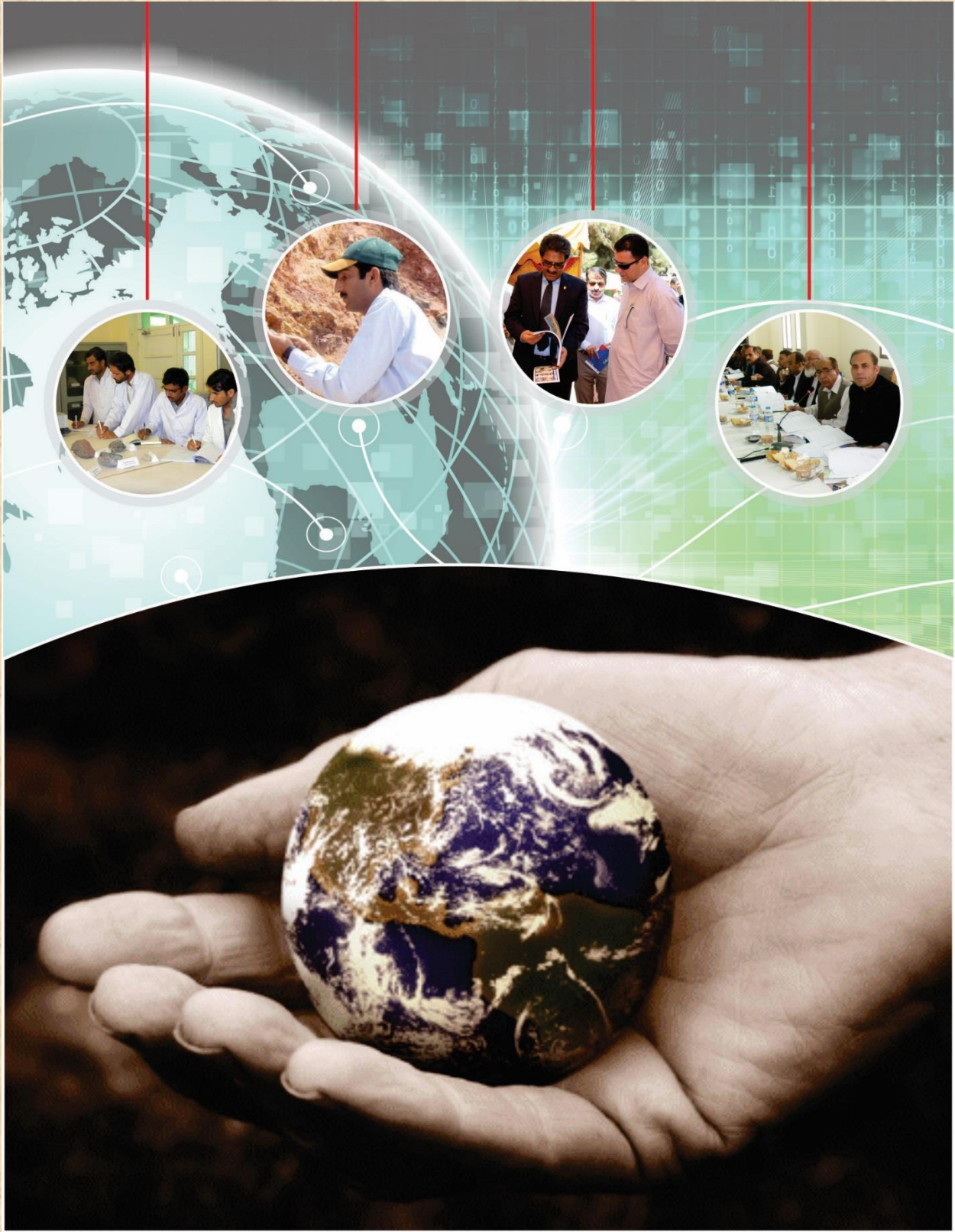
- ❖ **Computer Laboratory:** A computer laboratory with statistical packages such as SPSS, MINITAB, R and MATLAB for students and researchers.
- ❖ **Departmental Library:** The departmental seminar library has books on different branches of statistics.
- ❖ **Internet:** The internet facility is available in the Computer Lab as well as in the rooms of teaching staff. A large number of books and international research journals are also available on Digital Library provided by Higher Education Commission and research articles of interest can be downloaded.



Faculty of Earth & Environmental Sciences

- Geography
- Center of Excellence in Mineralogy





DEPARTMENT OF GEOGRAPHY

Introduction

- Geography is one of the old and mother disciplines that bridges physical and social sciences. It examines the interlocking systems of the natural and human environments; evaluates earth's potential and assesses the available means to exploit these potentials in a sustainable manner for the man's life. Geography explains human behavior in spatial terms at all levels from small scale personal activities to the geo-political practices of nation-states.
- The major essence of geography is to explain and map terrestrial processes at various spatial and temporal scales on the surface pertaining to physical and human environments.
- The GIS, Remote Sensing and Computer based Cartography skills help one to understand easily the human induced changes to the environment which threaten the balance of life itself.
- The Department of Geography was established in 1985. It caters formal education and research in the fields of Human and Physical Geography with a focus on spatial dimensions of human activities and physical landscapes and awards Master, M.Phil and Ph.D. Degrees. Apart from M.Sc. the Department of Geography offers higher studies of M.Phil. & Ph.D. programs. Since 2011, the Geography curriculum encompasses new programs including Environmental Sciences, Climate Change Studies, Disaster management and Resource Management.

Objectives

- To provide educational programs which encourage students to think creatively, constructively and to communicate ideas effectively so that to provide qualified and focused professionals in the subject of Geography to meet the future needs of educational institutions and field oriented research departments.
- To foster an environment that promotes learning, research and practice through quality teaching and research while encouraging mutual respect, tolerance and sensitivity.

Job Opportunities

There is a lot of demand of Geography's graduates in various sectors and are reported competitive and well performers. A few employment opportunities institutions are listed below:

- All educational and research institutions
- Planning and Development Departments
- Firms consulting on environmental problems
- Institutions needing Environmental Analysts
- As a GIS Analyst in Corporation Operating GIS
- Census Organizations: Population, Agricultural and etc.
- Government Strategic Policy Analysis Departments
- Armed Forces (Air Force, Navy and Army).
- Natural Resource Management (NRM)
- GSP and Survey of Pakistan
- Meteorological Observatories of Pakistan
- Tourism Departments

- Crisis Management Cells
- National Disaster management Authority (NDMA)
- Educational Institutions
- SUPARCO
- As a Social organizer in NGOs.
- Rural Development & Local Government
- UNDP

Faculty Members

S.#	Teacher's Name	Designation	Qualification
1	Prof. Dr. Iftikhar Ahmad	Professor / Dean Faculty of Earth & Environmental Sciences	Ph.D
2	Mr. Taleem Badshah Khattak	Assistant Professor/Chairperson	M.Sc. (Peshawar)
3	Dr. Romana Ambreen	Associate Professor	Ph.D
4	Dr. Muhammad Nawaz	Assistant Professor	Ph.D
5	Dr. Ahmad Saeed	Assistant Professor	Ph.D
6	Dr. Said Qasim	Assistant Professor	Ph.D
7	Mr. Aminullah Khan	Assistant Professor	M.Phil
8	Mrs. Abida Achakzai	Lecturer	M.Phil. Balochistan
9	Mr. Sanaullah Panezai	Lecturer	M.S. (AIT, Thailand)
10	Ms. Nargis Kamal	Lecturer	M.S. (AIT, Thailand)
11	Muhammad Ayoub Baloch	Assistant Professor	M.Phil

PROGRAMS

- M.Phil in Geography by approved criteria of HEC (courses detail available on UOB website).
- PhD in Geography by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS & 3.00 on a scale of 4.00 in MS/M.Phil. on semester system or 60% marks in MS/M.Phil.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

M.Phil

SEMESTER BREAKUP

Semester-I

S.#	Course Code	Course Title	Cr. Hrs
1	Geog. 701	Geography of Hazards	3(3-0)
2	Geog. 702	Human Geography	3(3-0)
3	Geog. 703	Advanced Research Methods	3(3-0)

Semester-II

S.#	Course Code	Course Title	Cr. Hrs
1	Geog. 704	Quantitative Methods	3(3-0)
2	Geog.	Elective Course	3(3-0)
3	Geog.	Elective Course	3(3-0)
4	Geog.	Elective Course	3(3-0)

Elective Courses

S.#	Course Code	Course Title	Cr. Hrs
1	Geog. 705	Geographic Information System	3(2-1)
2	Geog. 706	Remote Sensing	3(2-1)
3	Geog. 707	Ecological Principles for natural Resource Conservation	3(3-0)
4	Geog. 708	Land degradation and Conservation	3(3-0)
5	Geog. 709	Bio-diversity Conservation	3(3-0)
6	Geog. 710	Environmental Degradation and Sustainability	3(3-0)
7	Geog. 711	Climate Change Studies	3(3-0)
8	Geog. 712	Sedimentation and Stratigraphy	3(3-0)
9	Geog. 713	Techniques in Geomorphology	3(3-0)
10	Geog. 714	Applied Geomorphology	3(3-0)
11	Geog. 715	Quaternary Geology	3(3-0)
12	Geog. 716	Regional Planning	3(3-0)
13	Geog. 717	Environmental Planning and Management	3(3-0)
14	Geog. 718	Urban Planning	3(3-0)
15	Geog. 719	Environmental Impact Assessment	3(3-0)
16	Geog. 720	Urban Geography	3(3-0)
17	Geog. 721	Geography of Irrigation	3(3-0)
18	Geog. 722	Agricultural Geography	3(3-0)
19	Geog. 723	Rural Geography	3(3-0)
20	Geog. 724	Population Geography	3(3-0)
21	Geog. 725	Political Geography	3(3-0)
22	Geog. 726	Geography of Balochistan Province	3(3-0)
23	Geog. 727	Medical Geography	3(3-0)

Ph.D

Group 'A' Physical Geography

Course No	Papers' Title	Credit Hours
Geog. 804	Pleistocene Geomorphology	3
Geog. 805	Quaternary Geomorphology	3
Geog. 806	Coastal Morphology	3
Geog. 807	Fluvial Morphology	3
Geog. 808	Glaciology	3
Geog. 809	Geography of Arid Lands	3
Geog. 810	Soil Geography	3
Geog. 811	Meteorology	3
Geog. 812	Hydro-geography	3
Geog. 813	Advance Plant Geography	3
Geog. 814	Zoo-Geography	3
Geog. 815	Climatic Change Studies	3
Geog. 816	Geophysics	3
Geog. 817	Geo-lithology	3
Geog. 818	Mathematical Geography	3
Geog. 819	Geodesy /and Advance surveying	3

Group 'B' Human Geography

Course No	Papers' Title	Credit Hours
Geog. 820	Cultural Geography	3
Geog. 821	Social Geography	3
Geog. 822	Population Geography	3
Geog. 823	Transportation Geography	3
Geog. 824	Urban Geography and Planning	3
Geog. 825	Rural Settlement Geography	3
Geog. 826	Agriculture Geography	3
Geog. 827	Urban and rural land use	3
Geog. 828	Political Geography	3
Geog. 829	Behavioral Geography	3
Geog. 830	Geography of Manufacturing	3
Geog. 831	Geography of Marketing	3
Geog. 832	Regional Planning	3
Geog. 833	Geography of Recreation and Tourism	3
Geog. 834	Military Geography	3
Geog. 835	Medical Geography	3
Geog. 836	Industrial Geography	3
Geog. 837	Geography of Migration and Regional Development	3
Geog. 838	Historical Geography	3
Geog. 839	Geography of Health Care	3
Geog. 840	Geography of Housing	3
Geog. 814	Geography of Crimes	3

Geog. 842	Geography of Administration	3
Geog. 843	Geography of Religion	3
Geog. 844	Geography of Nutrition	

Group 'C' Applied Geography

Course No	Papers' Title	Credit Hours
Geog. 850	Environmental Geography	3
Geog. 851	Quantitative Geography	3
Geog. 852	Gender Geography	3
Geog. 853	Geography of Natural Hazards and Disasters	3
Geog. 854	Applied Geomorphology	3
Geog. 855	Development Planning	3
Geog. 856	Sustainable Development of Natural Resources	3
Geog. 857	Environmental Impact Assessment (EIA)	3
Geog. 858	Applied Cartography	3
Geog. 859	Advance Applied Geography	3
Geog. 860	Social Impact Assessment (SIA)	3
Geog. 861	Mountain Geography	3
Geog. 862	Geography of Retailing	3
Geog. 863	Urban Environmental Planning and Management	3

Group 'D' Regional Geography

Course No	Papers' Title	Credit Hours
Geog. 870	Far East	3
Geog. 871	South and South East Asia	3
Geog. 872	South West Asia	3
Geog. 873	Central Asia	3
Geog. 874	Western Europe	3
Geog. 875	Eastern Europe	3
Geog. 876	North America	3
Geog. 877	Latin America	3
Geog. 878	North Africa	3
Geog. 879	Sub Saharan Africa	3
Geog. 880	Australia	3
Geog. 881	Muslim World	3

Group 'E' Geo-informatics

Course No	Papers' Title	Credit Hours
Geog. 890	Geographical Analysis	3
Geog. 891	Global Positioning System	3
Geog. 892	Digital Image Processing	3
Geog. 893	Spatial Data Visualization	3
Geog. 894	Spatial Modeling	3
Geog. 895	Photogrammetry	3
Geog. 896	Spatial Data Infrastructure	3

Geog. 897	Cyber Geography	3
Geog. 898	Computer Cartography	3
Geog. 899	Cartographic Techniques	3
Geog.900	Entrepreneurship Education	3

Note: the courses for Ph.D. are under process for finalization, and would be ready for implementation before the start of the academic session. 2018-19.

Facilities

- **Laboratories:** The department has the facilities of various laboratories like;
 - Meteorological Laboratory
 - GIS and RS Laboratory
 - Cartographic Lab
 - Geomorphological Lab. (Combined use the Geology Department's museum for Identification of rock samples)
- **Departmental Library:** The departmental library is managed by a qualified librarian and has a collection of books covering a wide range of disciplines in Geography. The existing library provides services to both students and professionals belonging to different environment related departments/ institutions within and outside the campus.
- **Internet Facilities:** The internet facility is available at the department. A large numbers of national and international journals are available on Digital Library provided by HEC. The downloading of these research articles of your interests is free of cast.

CENTRE OF EXCELLENCE IN MINERALOGY (CEM)

Introduction:

- The Centre of Excellence in Mineralogy (C.E.M.) was established in 1974 in the premises of the University of Balochistan through a Gazette notification of the Federal Government, following the announcement of New Education Policy 1972-80, under the Act of Parliament 1974. The above Act was revised in 1976 to be called Centres of Excellence Act, 1976. The C.E.M. is funded by the Federal Ministry of Education through Higher Education Commission (defunct UGC), and is managed and supervised by its own Board of Governors under the Chairmanship of the Vice Chancellor, University of Balochistan.
- The academic policies of the Centre are framed by the Academic Committee of the C.E.M subject to the approval by the Board of Advanced Studies and Research, Academic Council and the Syndicate of the University of Balochistan. The administrative and financial policies are governed by the rules and regulations made or adopted by the Board of Governors. The Director is responsible for implementing the academic, administrative and financial policies of the Centre.
- The Centre of Excellence in Mineralogy is located in the Province of Balochistan which is blessed with vast reserves of a variety of minerals, oil & gas and coal. The important geological features e.g. long chain of Chaghai Volcanic Arc; rich in copper and gold mineralization, a long strip of highly mineralized ophiolitic rocks, Kirther and Sulaiman Mountain Ranges and vast unexplored Makran Basin showing prospects of oils and gas offer a great deal of research and development opportunities. Qualified and trained manpower is therefore, needed to explore and exploit the mineral and energy resources of Balochistan in particular and Pakistan in general and study the geology of Balochistan in order to find new ways and means for new discoveries of economic mineral deposits.

Vision

- Centre of Excellence in Mineralogy is committed to pursue excellence in fundamental and applied research in geological sciences with special emphasize on Mineral exploration and Petroleum Exploration, maintain high quality education and research.
- The Centre is dedicated to serve the region and nation demand by providing skilled manpower to explore the mineral resources of the country.

Mission and Objectives of the Centre

- The main objectives of the Centre of excellence in Mineralogy as defined in the Act (IX of 1976) are
 - (a) To engage in goal-oriented high-level teaching and research;
 - (b) To train research workers;
 - (c) To establish .M.Phil., Ph.D. and other programs in the relevant discipline in accordance with the standard and requirements of the University in which the Centre is established;
 - (d) To promote-cooperation in inter-disciplinary relationship with other teaching and research establishment;

- (e) To arrange conferences, seminars and refresher courses for the development of teaching and research; and
- (f) To conduct teaching and research in such particular discipline as is assigned to it by the Federal Government in consultation with the University in which the Centre is established.

Faculty Member:

SNO	Name	Designation	Qualification
1	Prof. Dr. Abdul Salam	Professor/Director	Ph.D (UK)
2	Dr. Aimal khan Kasi	Associate Professor	Ph.D (Pak)
3	Dr. Muhammad Ishaq Kakar	Associate Professor	Ph.D (Pak)
4	Dr. Razaq Abdul Manan Durrani	Assistant Professor	Ph.D (Pak)
5	Mr. Muhammad Ayoub Mandokhail	Assistant Professor	M.Phil
6	Syed Wajid Hanif Bukhari	Assistant Professor	M.Phil
7	Mr. Muhammad Minhas	Assistant Professor	M.Phil
8	Mr. Inayatullah Mengal	Assistant Professor	M.Phil
9	Mr. Ahmed Shah Kakar	Assistant Professor	M.Phil

M.Phil

SEMESTER BREAKUP:

1st term (during 1 st term 3 core courses and one optional course is needed to be completed)			
S.No.	Course No	Title course	Credit Hours
1	MIN-701	Research Methodology and Technical Writing	3
2	MIN-702	Applied Mineralogy	3
3	MIN-703	Field Geology	3
Optional 1(decided by supervisor and Director from optional courses)			3
2nd Term (during 2 nd term 2 core courses and 2 optional courses are needed to be completed)			
4	MIN-704	Applied Geochemistry	3
5	MIN-705	Structural Geology	3
Optional 2 (decided by supervisor and director from optional courses)			3
Optional 3 (decided by supervisor and director from optional courses)			3
Optional courses			
6	MIN-706	Ore Geology, mining and processing	3
7	MIN-707	Metallic Mineral Deposits	3
8	MIN-708	Non-Metallic Mineral Deposits	3
9	MIN-709	Clastic Sedimentology	3
10	MIN-710	Carbonate Sedimentology	3
11	MIN-711	Continental Environments and Facies	3
12	MIN-712	Marine and Transitional Sedimentary Environments	3
13	MIN-7113	Tectonics	3
14	MIN-714	Paleontology	3
15	MIN-715	Chemical Methods of Rock Analysis	3
16	MIN-716	Hydrogeology	3
17	MIN-717	Engineering Geology	3
18	MIN-718	Applied Geophysics	3

19	MIN-719	Paleomagnetism	3
20	MIN-720	Marine Geology	3
21	MIN-721	Igneous and Metamorphic Petrology	3

Ph.D

BREAK UP OF COURSES:

1 st Term (during 1 st term 2 core courses and one optional course is needed to be completed)			
S.No.	Course No.	Title of the course	Credit Hours
1	MIN-801	Advanced Instrumentation in Geology	3
2	MIN-802	Environmental Geology	3
Optional 1 (decided by supervisor and director from optional courses)			3
2 nd Term (during 2 nd term 2 core courses and one optional course is needed to be completed)			
3	MIN-803	Regional Geology	3
4	MIN-804	Advanced Structural Geology and Tectonics	3
Optional 2 (decided by supervisor and director from optional courses)			3
Optional courses for PhD degree			
5	MIN-805	Advanced Igneous Petrology	3
6	MIN-806	Advanced Metamorphic Petrology	3
7	MIN-807	Advanced Sedimentology	3
8	MIN-808	Sequence Stratigraphy	3
9	MIN-809	Petroleum Geology	3
10	MIN-810	Sedimentary Basins	3
11	MIN-811	Micro-Paleontology	3
12	MIN-812	Remote Sensing	3
13	MIN-813	Isotope Geology and Geochronology	3
14	MIN-814	Coal Geology	3
15	MIN-815	Advanced Hydrogeology	3
16	MIN-816	Seismology	3
17	MIN-817	Geographic Information Systems	3

Facilities:

- **Geochemistry Laboratory:** The laboratory has adequate facilities for geochemical analysis and is equipped with Atomic Absorption Spectrometer, Differential Thermal Analyzer, French-made SIGMA-CGR X-ray Diffractometer (currently out of order), X-Ray illuminator, pH-meters, Resistance Thermometers, Analytical Balances, Muffle Furnace, and Wet Pre-grinding Machine with necessary glassware and chemicals
- **Petrography Laboratory:** The laboratory has facilities for mineral and ore microscopy and is equipped with Polarizing Microscopes, Metallurgical and Inverted Metallurgical Microscopes, Zoom Stereo Microscopes, Automatic Point Counter, Mechanical Stage, and Rayner Refractometer.
- **Geophysics Laboratory:** The following equipment is available for geophysical surveys: Geoelectric Equipment, Seismic Data acquisition System, Self Potential Equipment, Portable Magnetometer.
- **Thin Section and Rock Cutting Laboratory**
- **Cartography Laboratory:** The laboratory has facilities for map drawing Computerized

and is equipped with a large (A0) size tracing table and relevant tracing and drawing gadgets.

- **Photography Laboratory:** The laboratory has facilities for developing and printing black and white photographs.
- **Museum:** Specimens of selected rocks and minerals, mostly belonging to Balochistan are at display.
- **Field Equipment:** The Centre has a good collection of various kinds of field equipment required for geological/geophysical field work including Two 4x4 Toyota Jeeps, Equipment for geological surveys and geophysical surveys, camping gear etc.
- **Students Computer Laboratory:** Computer Lab is equipped with ten latest computers with color/ black printers and Scanners (A4 and A3)
- **X-Ray Diffraction and dta. Lab.**



Faculty of Life Sciences

- Institute of Biochemistry
- Botany
- Microbiology
- Zoology
- CASVAB



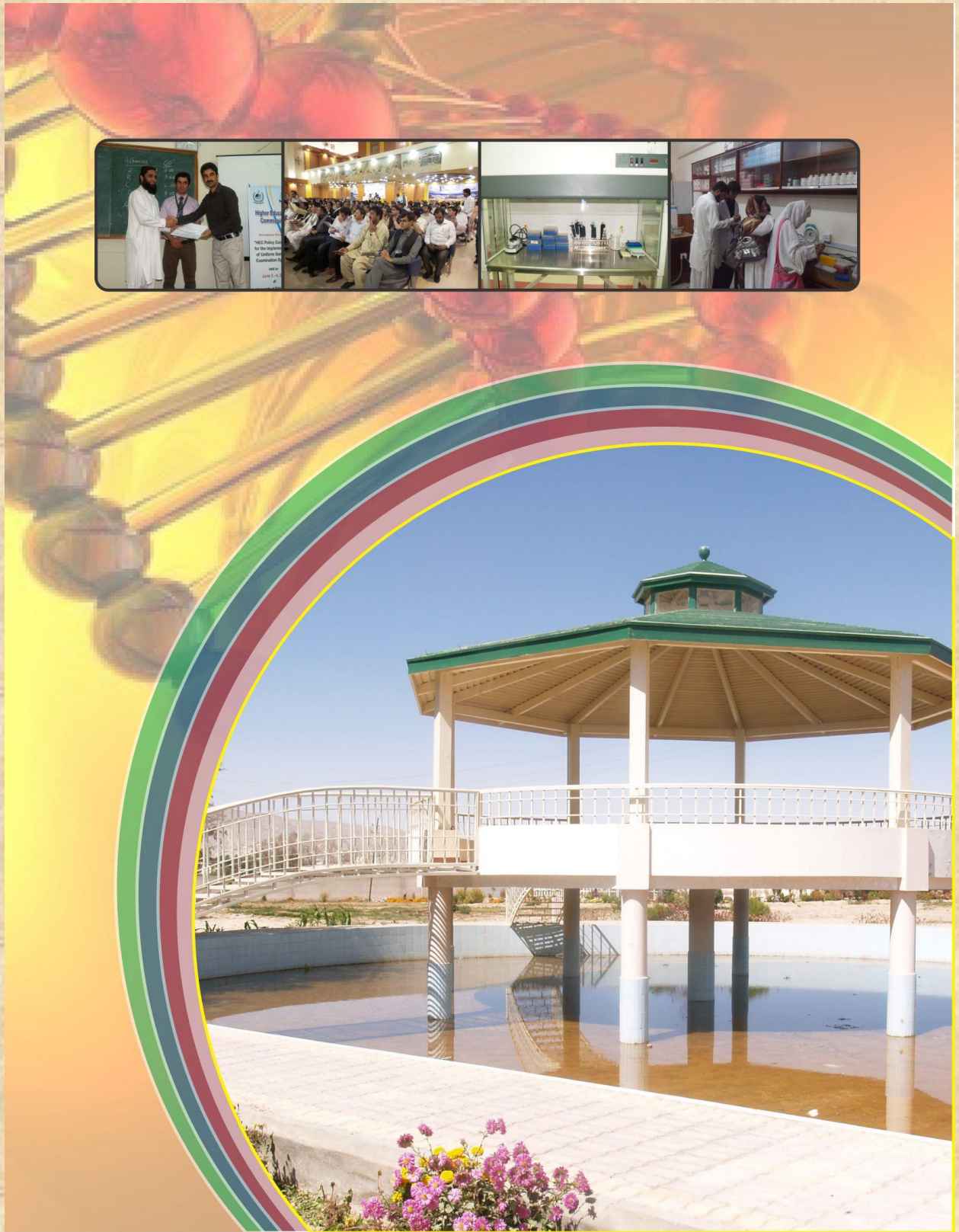
HUMANS



ANIMALS



PLANTS



INSTITUTE OF BIOCHEMISTRY

Introduction

- Biochemistry seeks to understand & explain living systems at the molecular level. It is a scientific discipline that finds applications across the biomedical & biological sciences & underpins the biotechnology revolution. It is developing at a rapid pace and has become an exciting and challenging subject.
- In the wake of the emerging needs at provincial level, the Institute of Biochemistry was established in 1986 initially. Since inception the institute has proven its academic and research credibility through nurturing high quality human resource in the relevant disciplines of Biochemistry. While following its institutional goals the institute has gradually evolved programs that is, incepted M.Sc. Biochemistry in 1992, BS (4-Years) in 2006. The institute also initiated M.Phil and PhD study programs.

Objectives

- To prepare cadres of students in modern biological science such as Biochemistry/ Biotechnology who will be able to make a valuable beginning in diverse careers pertaining to discipline of biochemistry or other disciplines having a direct or indirect academic and research linkages.
- To place considerable emphasis on research program exploring variety of technically feasible projects having socioeconomic importance, so as to be on the front line in solving our own problems in the area of biological sciences.

Job/Career Opportunities

- Pharmaceutical /food industries
- Public/Private research Institutes/centers relating to medical and agriculture.
- Educational Institutions-College/University level.
- Balochistan at present has become a hub of socio-economic activities. It is expanding its infrastructure and encourages development of industry. Numerous food & Pharmaceutical Industries are recently established in Hub. The PCSIR laboratory in Quetta is currently being expanded creating new job opportunities. In the teaching sector, a number of new universities and colleges in Balochistan are offering opportunities for Biochemistry graduates. Nationally also, research in biomedical sciences is attracting attention.

Faculty

S#	Name	Designation	Qualification
1	Dr. Mohammad Ayub	Associate Professor/ Director	Ph.D.
2	Prof. Dr. M. Anwer Panezai	Professor	Ph.D.
3	Dr. Muhammad Azam	Associate Professor	Ph.D.
4	Prof. Dr. Zahid Mehmood	Professor	Ph.D.
5	Mr. Khalid Mehmood	Assistant Professor	M.Phil.
6	Prof. Dr. Ashif Sajjad	Professor	Ph.D.

7	Dr. Noor Hassan	Assistant Professor	Ph.D.
8	Dr. Samira Khaliq	Lecturer	Ph.D.
9	Dr. Sharif Hasni	Lecturer	Ph.D.
10	Dr. Imran Ali	Assistant Professor	Ph.D.
11	Mrs. Pari Gul	Lecturer	M.Phil
12	Dr. Aamir Rasool	Lecturer	Ph.D.

Programs

- M.Phil in Biochemistry by approved criteria of HEC (courses detail available on UOB website).
- PhD in Biochemistry by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil is one and half years and for PhD, it is Three year.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A./F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil in Biochemistry & Biotechnology:

First Semester

S.No	Course Code	Couse Title	Credit Hours
1	MolBio-601	Molecular Biology	3
2	C-BioM-616	Chemistry of Biomolecules	3
3	M-Bioch-601	Membrane Biochemistry	3
4	BCHM-619	Metabolism	3
5		Research Methodology Workshop	3
Total			15

Second Semester

S.No	Course Code	Course Title	Credit Hours
1	RT-501	Research Technique	3
2	APC-617	Advance in Protein Chemistry	3
3	BIOTECH-1-618	Recombinant DNA Technology (Optional)	3
4	BIOTECH-2-619	Tissue Culture	3
5		Industrial Biotechnology	3
Total			15

Third & Fourth Semester:

Thesis writing

PhD in Biochemistry & Biotechnology:

First Semester:

S.No	Course Code	Course Title	Credit Hours
1	MolBio-661	Advanced Molecular Biology (Optional)	3
2	CBCHM-662	Clinical Biochemistry	3
3	BCHM-663	Biochemistry-II	3
4		Advanced Research Methodology	3
Total			12

Second Semester

S.No	Course Code	Course Title	Credit Hours
1	METH-664	Techniques in Biochemistry & Biotechnology (PhD)	3
2	MolBio-665	Genomics (for Mphil & PhD Optional)	3
3	CI-667	Clinical Immunology	3
4		Modern Biotechnology	3
Total			12

Third & Fourth Semester

Thesis Writing

Facilities:

- Well-equipped, purpose built laboratories. Major equipment in the Institute include, High Performance liquid Chromatography(HPLC); Gas Liquid Chromatography (GLC); Scintillation Counter; Electrophoresis Units; Centrifuges; Spectrophotometers; Furnaces; Autoclaves; Laminar Flow hoods etc.
- Internet Facility. Laboratories are equipped with internet facility.
- Computer Laboratory. A full-fledge computer laboratory equipped with 25 computer of high configuration complemented by internet facility.
- Teaching Labs. Three well equipped and modern labs along with supporting staff are available for conducting practical for M.Phil and Ph.D programs.
- Research Labs. Four newly constructed labs with all modern facilities and a central lab, with many modern and updated research facilities are available for M.Phil and Ph.D scholars.
- Departmental Library. A newly constructed departmental library with approximately 3000 books and scientific journals available for the students.

DEPARTMENT OF BOTANY

Introduction

- Botany is the scientific study of plants and fungi. Plants are a vital component of the Biosphere and are directly responsible for the conditions required for life on earth. Plants life can be studied from different perspectives i.e., from the genetic, molecular and biochemical level through different cell organelles, tissues, organs, individuals, populations, and plant communities. Plants are also the mainstay of human and animal diets and provide medicines, gum, timber, paper, clothing, shelter, and energy.
- The department of botany was established in year 1979. In the beginning it was functioning as a department of Life Sciences. In 1980 the department of Botany was recognized as an exclusive department.
- The Department is aimed to impart training in the field of plant sciences at undergraduate and post graduate level. The academic program comprises of courses leading to M.Sc. degree as well as research for M.Phil and Ph.D. degrees and independent research projects are also undertaken by the faculty members.

Objectives

- To create and develop cadres of highly qualified and focused professionals in the subject of Botany so that to meet the future needs of educational institutions/ research organizations/ forestry/ horticulture.

To foster an environment that promotes learning through quality teaching and research while encouraging mutual respect, tolerance and sensitivity.

Job Opportunities

- Education Institutes, Colleges and Universities.
- Pharmaceutical Industry.
- Forests, Wild life, Agriculture and Horticulture, Floriculture.
- Research Organizations, Pakistan Agriculture Research Council (PARC), Arid Zone Research Institute (AZRI), Pakistan Council for Science & Industrial Research (PCSIR), Pakistan Meteorological Department (PMD).
- Public / Private Research Organizations.

Faculty Members

S. #	Name	Designation	Qualification
1	Prof. Dr. Muddasir Israr	Meritorious Professor & Dean, Faculty of Life Sciences	Ph.D & Postdoc
2	Dr. Saeed-ur-Rehman	Professor/ Chairperson	Ph.D
3	Dr. A.K.K. Achakzai	Professor (TTS)	Ph.D
4	Dr. Atta Muhammad Sarangzai	Professor	Ph.D & Postdoc
5	Dr. Mufakhir Jan	Professor	Ph.D

6	Dr. Sadullah Laghari	Associate Professor	Ph.D
7	Dr. Zahoor Ahmed Bazai	Associate Professor & Director QAC	Ph.D
8	Dr. Ghazal Shaheen	(On Deputation) Assistant Professor	Ph.D
9	Mrs. Basira Akhtar	Assistant Professor	M.Phil
10	Dr. Mohammad Younis	Associate Professor (TTS)	Ph.D & Postdoc
11	Dr. Shamim Gul	Assistant Professor (TTS)	Ph.D
12	Mrs. Shazia Saeed	Lecturer	M.Phil
13	Mrs. Ayesha Masood	Lecturer	M.Phil
14	Miss Kanval Shaukat	Lecturer (on study leave)	M.Phil
15	Mrs. Shaista Anjum	Lecturer (on study leav)	M.Phil
16	Miss Bakht Zareen	Assistant Professor (on leave)	M.Phil
17	Mrs. Palwasha Achakzai	Assistant Professor	M.Phil

Programs

- M.Phil in Botany by approved criteria of HEC (courses detail available on UOB website).
- PhD in Botany by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil

1st Semester

Code	Subject Title	Cr. Hrs.
BOT-708	Applied Ethno Botany and Plant Systematics (Core subject)	4(3-1)
BOT-719	Agricultural Environments (Core subject)	4(3-1)
	One optional paper from the given list of optional paper for M.Phil. courses	4(3-1)
Total Cr. Hrs/Semester		12

2nd Semester

Code	Subject Title	Cr. Hrs.
BOT-701	Natural Resources Management and Land Evaluation (Core subject)	4(3-1)
BOT-720	Advances in Plant Ecology (Core subject)	4(3-1)
	One optional paper from the given list of optional paper for M.Phil. courses	4(3-1)
Total Cr. Hrs/Semester		12

3rd & 4th Semester

Code	Subject Title	Cr. Hrs.
-	Synopsis preparation, Review of Literature and Fieldwork for research, Data collection and samples analysis, Thesis writing	-

Ph.D

1st Semester

Code	Subject Title	Cr. Hrs.
BOT-710	Air Pollution and Air Quality Management (Core subject)	4(3-1)
BOT-718	Medicinal Plants (Core subject)	4(3-1)
	One optional paper (if necessary) from the given list of optional paper for Ph.D. courses	4(3-1)
Total Cr. Hrs/Semester		8-12

2nd Semester

Code	Subject Title	Cr. Hrs.
BOT-714	Plant and Environmental Pollution (Core subject)	4(3-1)
BOT-113	Statistics in Research (Core subject)	4(3-1)
	One optional paper (if necessary) from the given list of optional paper for Ph.D. courses	4(3-1)
Total Cr. Hrs/Semester		8-12

3rd & 4th Semester

Code	Subject Title	Cr. Hrs.
-	Synopsis preparation, Synopsis defense and Comprehensive examination, Review of Literature and Fieldwork for research	-

5th & 6th semester

Code	Subject Title	Cr. Hrs.
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-	Thesis writing and paper publication	12
Grand Total Cr. Hrs/program		30

Facilities

- The Department is fully equipped with modern sophisticated equipment. Following are the details
- Teaching Laboratories. The Department of Botany has three general Laboratories. The supporting staff provides technical support and relevant equipment to the M.Phil & Ph.D. Students.
- Research Laboratories. Nine research Laboratories in the field of Plant Physiology, Environmental Biology/Taxonomy, Economic Botany/Anatomy, Ecology, Genetics, Molecular Biology, Phytosociology and Dendrochronology have been developed with sophisticated equipment's.
- Plant Tissue Culture Technology Laboratory. It deals with the mass production of plants, under aseptic environment employing artificial growing conditions in glass (In-vitro). This important technology is based on the principle that production of genetically modified plant is only possible if the target species have a successful and efficient regeneration system. The success of modern Plant Biotechnology is attributed to this very important technique, which plays an important role in in-vitro propagation of disease free plants and multiplying with unmatched speed of endangered species as well as species of difficult to regenerate.
- Sophisticated Equipment's. Atomic Absorption Spectrometer, Environmental Chamber, High Performance Liquid Chromatography (HPLC), Electrophoresis, Thermal Cycler, U.V-Vis. Spectrophotometer, Biophotometer, Germinators, Weather Monitoring Station, Flame Photometer.
- Computer Laboratory. Department has well established computer laboratory Equipped with 24 Pentium IV computers, connected with 2 printers and photocopier, which can be used by research scholars and faculty.
- Departmental Library. The Departmental Library is managed by a qualified Librarian and has over 1300 books covering a wide range of disciplines in Botany for teaching and research purposes.
- Internet Facility. The internet facility is available. A large number of International research Journals are also available on Digital Library provided by Higher Education Commission (HEC) and research article of interest can also be downloaded.
- Research Journal. The Department of Botany is associated with the International Society of Pure and Applied Biology (ISPAB) to publish a research journal entitled as Pure and Applied Biology (PAB). It is published quarterly.

DEPARTMENT OF MICROBIOLOGY

Introduction

- Microbiology is the study of microorganisms; include Bacteria, Fungi, Viruses, and Protozoa etc.(both useful and harmful for human beings Plants and fish etc) through applying different scientific technique/s, microorganisms and microbial enzymes can be used in industrial processes to carry out reactions that are not economically feasible by chemical means. Microbiology offers the possibility of major improvements in the way medicines are developed and manufactured.
- It is employed principally in health care (animal and Human beings), fine chemicals, brewing & distilling, food and food related industries, where they are involved in research and development, in process design & control, in management and in quality control. Therefore, various disciplines of Microbiology are prime choice of men and women, mainly because of its laboratory-based activities.
- The Department of Microbiology was established in May 2006. The department is committed to the production of marketable and qualified product capable of finding solution/ remedies against prevalent and new emerging diseases, production of different vaccines and preservation of different foods etc. through research and development.
- Currently the department offers B.S Microbiology, M.Sc Microbiology, M.Phil/M.S Microbiology and Ph.D Microbiology degree programs. Committed and qualified faculty of the department facilitates research scholars and also carries out innovative projects in diversified areas of Microbiology

Objectives

- To foster an environment that promotes learning through quality teaching and research while encouraging students to excel their professional skills, concepts and practices so that to comply with the emerging market needs in the public and private sectors.
- To provide qualified and focused professionals in the subject of Microbiology to meet the future needs of educational institutes and/or industries.

Job/Career Opportunities

- Food packaging and processing industry
- Quality control operations of safe drinking water
- Public Health Institutions
- Pharmaceutical Industry
- Diagnostic Laboratory Technicians / Experts
- Biological production industry
- Biotechnological interventions in environmental sciences like Bioremediation.
- Food safety authorities
- Environmental protection agency
- Agriculture research organizations

Faculty Members

S.#	Name	Designation	Qualification
1	Dr. Abdul Malik Tareen	Assistant Professor Chairperson	Ph.D
2	Mr. Abdul Wadood	Assistant Professor	M.Phil
3	Dr. Ali Akbar	Assistant Professor	Ph.D
4	Mr. Shabir Ahmed Khan	Lecturer	M.Phil
5	Dr. Kaleemullah Mandokhail	Associate Professor	Ph.D
6	Mr. Imran Nawaz Bugti	Assistant Professor	Ph.D
7	Dr. Fazal ur Rehman	Assistant Professor	Ph.D
8	Mr. Mohammad Yasir (Leave)	Lecturer	M.Phil
9	Mr. Mumtaz	Assistant Professor	M.Phil

Programs

- M.Phil in Microbiology by approved criteria of HEC (courses detail available on UOB website).
- PhD in Microbiology by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil Courses:

Code No.	Name of Course	Credits
Core courses		
Mic-501	General Bacteriology	3
Mic-502	Introduction to Immunology	3
Mic-503	Biostatistics	3

Mic-504	Research Methodology and critical analysis	3
Mic-505	Analytical techniques in Microbiology	3
Mic-506	Systemic Bacteriology	3
Code No.	Name of Course	Credits
Optional courses		
Mic-507	Environmental Microbiology	3
Mic-508	Bioinformatics	3
Mic-509	Biosafety and Biosecurity	3
Mic-510	Biochemistry	3
Mic-511	Microbial enzyme technology	3
Mic-512	Epidemiology and public health	3
Mic-513	Molecular basis of genetic diseases	3
Mic-514	Communicable diseases common to man and animals	3
Mic-515	Trends in Bioprocess Technology	3
Mic-516	Advances in Mycology	3

Ph.D Courses:

Code No.	Name of Course	Credits
Core courses		
Mic-601	Molecular virology	3
Mic-602	Cellular & Molecular Immunology	3
Mic-603	Advance in Applied Microbiology	3
Mic-604	Advanced Techniques/ Instrumentation in Microbiology	3
Optional courses		
Mic-605	Biodegradation	3
Mic-606	Advances in Microbial Genetics	3
Mic-607	Biosafety and Biosecurity	3
Mic-608	Recent trends in Molecular Biology	3
Mic-609	Molecular Mechanism of Pathogenesis	3
Mic-610	Waste water treatment	3
Mic-611	Proteomics & Genomics	3
Mic-612	Biochemistry	3
Mic-613	Biostatistics	3
Mic-614	Advances in Research Methodology	3
Mic-615	Advances in Food Microbiology and standardization	3

Facilities

- Teaching Laboratories: - A laboratory has been established at the Department of Microbiology to teach basic techniques in bacteriology, immunology virology, hematology and mycology. The laboratories of the Department Zoology are being shared for teaching different microbiological techniques, where desired equipment and other required facilities are available.

- **Research Laboratories:** - The research laboratories of CASVAB are being utilized for the research projects till the establishment of full-fledged research laboratories with required facilities become available at the Department of Microbiology

Research is carried out in the fields/area of:-

- Bacteriology
- Virology
- Mycology
- Immunology
- Molecular Biology
- Public Health problems
- Disease Diagnosis (Viral, Bacterial, Fungal & Protozoan)
- Biological Product (vaccines etc) production
- Serology & modern diagnostic/ research techniques
- Food preservation techniques
- Drug's efficacy against diseases.

Computer Laboratory:- The central computer laboratory of the University is located in the department of Microbiology and could also be used by research scholars/ teachers of other department. An independent computer laboratory has also been established at the Department where the students are also allowed to avail the facility to acquaint with latest available knowledge through internet facility.

Department Library:- A department library has been established and about 100 books on different topic of basis microbiology subjects are available for the students. Purchase of relevant books is in progress. Facility of Central Library has also been extended to the students, to increase their desired knowledge. Further, the library of CASVAB has all the relevant text/ reference books and laboratory manual concerning to the subject which are also made available for the students enrolled at the Department of Microbiology.

Internet Facility:- 10 Computers along with internet facility are available at the Department and students are allowed to use the internet after university timings.

Journals and Articles:- A large number of international research journals and articles are also available on Digital Library provided by here Higher Education Commission and facility has been extended to the students for downloading research articles etc.

Multimedia and overhead Projector Facility: - For teaching subjects on modern lines facility of Overhead project is available at the department.

DEPARTMENT OF ZOOLOGY

Introduction

- Zoology is the study of organism and their surrounding environment. Basically it is a combination of various disciplines such as Genetics, Physiology, Developmental Biology, Bio-nanotechnology, Parasitology, Entomology, Fisheries and Wild life etc. it plays pivotal role in socio-economic empowerment of poverty and in human resource development.
- The Department of Zoology was one of the pioneering disciplines in life sciences that was established in 1979. Dr. Maqsood Ali Ph. D (USA) was the first chairperson of the department. The department has crossed several milestones of its organizational milestones. It has diversified ways to engage motivated students across the province and other parts of the country. Currently the department offer graduate, post graduate and doctoral program in various disciplines of zoology.

Objectives

- To provide qualified and focused professional in the subject of Zoology research, practice and teaching to address the emerging needs of the public and private sectors educational institutes, industry and society generally.
- To impart knowledge of major disciplines of Zoology, enabling the students to understand the principle of organization and inter-relationship in the Biological system with particular references to animal diversity.

Job Opportunities

- Teaching and Research in public and private organizations
- Forestry, Agriculture and Biological control program
- Integrated pest management
- Poultry, Fisheries and livestock industry.
- Wildlife management and conservation, Government/NGO
- Environmental conservation and protection agencies
-

Faculty Members

S.#	Name	Designation	Qualification
1	Dr. Rehana Mushtaq	Professor	Ph.D
2	Dr. .Mohammad Iqbal Yasinzai	Professor/ Chairperson	Ph.D
3	Dr. Asmatullah kakar	Professor	Ph.D
4	Dr. Asim Iqbal	Associate Professor	Ph.D
5	Dr. .Shahbuddin	Assistant Professor	Ph.D
6	Dr. Ghulam Dastagir	Assistant Professor	Ph.D
7	Dr. Wali Mohammad	Assistant Professor	Ph.D
8	Dr. Ambreen Shaheen	Assistant Professor	Ph.D
9	Dr. Mahrukh Naseem	Assistant Professor	Ph.D
10	Mr. Zahoor Ahmed	Assistant Professor	M.Phil
11	Mr. Faizullah Khan.	Assistant Professor	M.Phil
12	Mr. Saeed Ahmed	Assistant Professor	M.Phil

13	Ms. Tahsen Ara	Lecturer	M.Phil
14	Mr. Kashif Kamran	Museum curator	M.Phil

Program

- M.Phil in Zoology by approved criteria of HEC (courses detail available on UOB website).
- PhD in Zoology by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M. Phil Zoology

(1st semester)

Code	Status	Course	Credit Hours
Zool (M.Phil)-501	Core	Biostatistics-1(Analytical Biostatistics	3+1
Zool (M.Phil)-503	Special	Entomology-I(Medical & Veterinary Entomology)	3+1
Zool (M.Phil)-505	Special	Parasitology-I(principal of Parasitology)	3+1
Zool (M.Phil)-507	Special	Limnology -I(Applied aquaculture & pond water Quality management)	3+1
Zool (M.Phil)-509	Special	Bionanotechnology _I	3+1
Zool (M.Phil)-511	Optional	Environmental Biology-I	3+1
Zool (M.Phil)-513	Optional	Advances in Genetics I	3+1

(2nd Semester)

Code	Status	Course	Credit Hours
Zool (M.Phil)-502	Core	Biostatistics-II(Analytical Biostatistics)	3+1
Zool (M.Phil)-504	Special	Entomology-II(Medical & Veterinary Entomology)	3+1
Zool (M.Phil)-506	Special	Parasitology-II(principal of Parasitology)	3+1
Zool (M.Phil)-508	Special	Limnology -II(Applied aquaculture & pond water Quality management)	3+1
Zool (M.Phil)-510	Special	Bionanotechnology _II	3+1
Zool (M.Phil)-512	Optional	Environmental Biology-II	3+1
Zool (M.Phil)-514	Optional	Advances in Genetics II	3+1

Ph. D Zoology

(1st Semester)

Code	Status	Course	Credit Hours
Course-I/Zool-601	Core	Research Methodology	3+1
Course-II/Zool-602	Core	Biostatistics and Computing	3+1
Course-III/Zool-603	Optional	Molecular Biology	3+1
Course-IV/Zool-604	Optional	Vaccine Biology	3+1

(2nd Semester)

Code	Status	Course	Credit Hours
Course-I/Zool-605	Specialized	Biotechnology and Bioinformatics	3+1
Course-II/Zool-606	Specialized	Immunology and Vector Biology	3+1
Course-III/Zool-607	Specialized	Wildlife Management of Balochistan	3+1
Course-IV/Zool-608	Specialized	Applied Entomology	3+1
Course-IV/Zool-609	Specialized	Fisheries	3+1
Course-IV/Zool-610	Specialized	General Parasitology	3+1
Course-IV/Zool-611	Specialized	General Assignment & Presentation	2+0

Note: Total credit hours for Ph. D course is 30 credited hours including 18 credited hours for coursework and 12 credit hours for research work.

Eligibility Criteria for Admission

Degree	Requirement
• For M.Phil	M.Sc 1st division, 2.5 CGPA in semester System
• For Ph.D	M.Phil with 3.0 CGP for Semester System/ for term System 1st division.

Facilities

- Computer Laboratory: An air conditioned computer lab, for the students is established, comprising 24 computers along with printer and internet Connectivity.
- Department Library: Department library under qualified librarian has more than 14580 books covering a wide range of discipline in Zoology for teaching and Research purposes are available
- Zoology Museum: Full-fledge wide range of collocation including stuff Animal and preserved animals for various respective courses are arranged.
- Laboratories: All basic biological research facilities are available including Central lab of faculty of life sciences.

CASVAB CENTRE FOR ADVANCED STUDIES IN VACCINOLOGY AND BIOTECHNOLOGY (CASVAB)

Introduction:

- The CASVAB stands with the University of Balochistan's Vision and Mission Statements, standards and measurable objectives and expected outcomes for scholars. A strategic plan being placed to achieve the program objectives:
- The CASVAB is the hub of life science initiatives at the University of Balochistan.
- All Scholars need a diverse educational experience through which they can develop an understanding and gets the explanation about the living systems at the molecular level.
- To achieve this objective a number of goals and elements were established. The Center for Advanced Studies in Vaccinology & Biotechnology (CASVAB) was established in 2005 with the grant of Higher Education Commission (HEC). Formerly CASVAB was Veterinary Research Institute and used to work under Provincial Livestock & Dairy Development Department Balochistan. Now CASVAB is declared as a regular department of University of Balochistan, Quetta, Pakistan.

Departmental Program Vision:

- The CASVAB is an Institute where fundamental change is brought about in our Scholars, ourselves, our environment and in the way we understand life at the molecular level. The Center for Advanced Studies in Vaccinology & Biotechnology (CASVAB) was established in 2005 with the grant of Higher Education Commission (HEC).
- Formerly CASVAB was Veterinary Research Institute and used to work under Provincial Livestock & Dairy Development Department Balochistan. Now CASVAB is declared as a regular department of University of Balochistan, Quetta, Pakistan.

Vision:

- To be a model Center of Biotechnological research and teaching activities leading to the production of affordable quality vaccines and other biotechnological products.

Mission:

- To produce qualified professionals in the subjects of Molecular Biology & Biotechnology, Microbiology, Physiology Endocrinology, Nutrition & Toxicology.
- To produce and provide cost-effective vaccines at Provincial, National and International level.
- To foster an environment that promotes learning through quality teaching and research.

Goals and Plans for the coming years:

- We will uphold and augment our reputation for providing excellence by offering M.Phil and Ph.D. education in broad range biological disciplines.
- We will grow our department by having highly qualified faculty M.Phil/PhD

Objective:

- Academia (MPhil & PhD)

Improve higher education & research facilities in Province for skilled Human Resource Development

- Research & Development
Animal Health & Animal Production
- Vaccine Production
Disease control of Livestock through mass scale vaccination
- Linkages
Open avenues of national & international co-operation in education, research & technology

Programs

- M.Phil in Casvab by approved criteria of HEC (courses detail available on UOB website).
- PhD in Casvab by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

Faculty Member:

S.No	Name	Designation	Qualification
1.	Prof. Dr. Muhammad Masood Tariq Kiyani	Director /Professor	PhD
2.	Dr.Farhat Abbas	Professor	PhD
3.	Dr.Masroor A.Bajwa	Professor	PhD
4.	Dr.Muhammad Aleem Akhtar	Lecturer	PhD
5.	Dr.Muhammad Arif Awan	Professor	PhD
6.	Dr.Kamran Taj	Assistant Professor	PhD
7.	Dr.Tauseef Asmat	Lecturer	PhD
8.	Dr.Zahid Mustafa	Assistant Professor	PhD
9.	Dr.Nadeem Rashid	Assistant Professor	PhD
10.	Dr.Saadullah jan	Associate Professor	PhD
11.	Dr.Shakeel Babar	Professor	PhD
12.	Dr.Zafar Ahmed	Professor	PhD
13.	Muhammad Shafi	Assistant Professor	M.Phil

14.	Irfan Shahzad Sheikh	Assistant Professor	M.Phil
15.	Mr.Tahir Hameed	Assistant Professor	PhD
16.	Dr. Asadullah	Assistant Professor	M.Phil
17.	Abdul Waheed Khan	Lecturer	M.Phil
18.	Babar Hilal Ahmed Abbasi	Assistant Professor	M.Phil
19.	Imran Taj	Lecturer	M.Phil
20.	Irshad Ali	Assistant Professor	M.Phil
21.	Majid Rafique	Assistant Professor	M.Phil
22.	Muhammad Ali Khan	Assistant Professor	M.Phil
23.	Yousaf Hassan	Lecturer	M.Phil
24.	Ziauddin	Lecturer	M.Phil
25.	Mr.Adnan Atique	Assistant Professor	MS

SEMESTER BREAKUP

Courses offered for M.Phil

Courses Title	Course Code	Credit Hour
Microbiology		
General Virology	MB 505	3(2-1)
General Bacteriology	MB 506	3(2-1)
Fundamentals of Mycology	MB 507	3(2-1)
Molecular Biology & Biotechnology		
Essentials of Molecular Biology	BT 503	3(2-1)
Fundamentals of Cell Biology	BT 504	3(2-1)
Principles of Biotechnology	BT 505	3(2-1)
Nutrition & Toxicology		
General Toxicology	NT 504	3(2-1)
General Nutrition	NT 505	3(2-1)
Physiology & Endocrinology		
General Physiology	PH 503	3(2-1)
Physiology of Digestion and Metabolism	PH 512	3(2-1)
Cell Physiology	PH 505	3(2-1)
Biochemistry		
Biochemistry	Biochem 501	3(2-1)

Ph.D Scholars

Courses Title	Course Code	Credit Hour
Microbiology		
Molecular Virology	MB 603	3(2-1)
Advanced Bacteriology	MB 604	3(2-1)
Advanced Protozoology	MB 609	3(2-1)
Molecular Biology & Biotechnology		
Industrial Biotechnology	BT 603	3(2-1)
Environmental Biotechnology	BT 604	3(2-1)
Nutrition & Toxicology		

Recent Advances in Nutrition & Toxicology	NT 603	3(2-1)
Mineral Nutrition	NT 607	3(2-1)
Physiology & Endocrinology		
Advanced Physiology	PH 603	3(2-1)
Cell Signaling	PH 606	3(2-1)
Physiology of Steroid Hormones	PH 607	3(2-1)

ADDITIONAL COURSES IN DIFFERENT DISCIPLINES

COURSES OFFERED

M.Phil Program: Subject: - Microbiology

S.No	Course Title	Course No.	Credit Hours
01	General Immunology	MB 504	3(2-1)
02	Protozoology & Helminthology	MB 508	4(3-1)
03	Bioinformatics	BT 507	3(1-2)
04	Biostatistics	Stat 501	3(3-0)

Ph.D Program: Subject: - Microbiology:

S.No	Course Title	Course No.	Credit Hours
01	Advanced Immunology	MB 606	3(2-1)
02	Molecular Genetics	BT 606	3(2-1)
03	Experimental Statistics	Stat 601	3(3-0)

M.Phil Program: Subject: - Biotechnology & Molecular Biology:

S.No	Course Title	Course No.	Credit Hours
01	Vaccine Technology	BT 506	4(3-1)
02	Bioinformatics	BT 507	3(1-2)
03	Fundamentals of Enzymology	PH 507	3(2-1)
04	Biostatistics	Stat 501	3(3-0)

Ph.D Program: Subject: - Biotechnology & Molecular Biology:

S.No	Course Title	Course No.	Credit Hours
01	Molecular Genetics	BT 606	3(2-1)
02	Advanced Immunology	MT 606	3(2-1)
03	Experimental Statistics	Stat 601	3(3-0)

M.Phil Program: Subject:- Nutrition and Toxicology:

S.No	Course Title	Course No.	Credit Hours
01	Applied Toxicology	NT 511	3(2-1)
02	Applied Nutrition	NT 510	3(2-1)
03	Food Toxicology	NT 509	3(3-0)
04	Biostatistics	Stat 501	3(3-0)

Ph.D Program: Subject:- Nutrition and Toxicology:

S.No	Course Title	Course No.	Credit Hours
01	Environmental Toxicology	NT 608	3(2-1)
02	Advanced Analytical Techniques in Nutrition and Toxicology	NT 604	3(2-1)
03	Experimental Statistics	Stat 601	3(3-0)

M.Phil Program: Subject:- Physiology & Endocrinology (PH):

S.No	Course Title	Course No.	Credit Hours
01	Reproductive Physiology	PH 506	3(2-1)
02	Fundamentals of Enzymology	PH 507	3(2-1)
03	Food Toxicology	NT 509	3(3-0)
04	Biostatistics	Stat 501	3(3-0)

Ph.D Program: Subject:- Physiology & Endocrinology:

S.No	Course Title	Course No.	Credit Hours
01	Molecular Endocrinology	PH 605	3(2-1)
02	Advanced Analytical Techniques in Nutrition and Toxicology	NT 604	3(2-1)
03	Experimental Statistics	Stat 601	3(3-0)

Facilities:

The specializations offered by CASVAB there are 8 teaching and research Laboratories. The research laboratories are adequately equipped. The list of some of the equipment / instruments is provided below;

1	Analytical Balance, Shimadzu Japan
2	Autoclave, Model Mac 1200
3	Balance high capacity, Kerm German Cap. 8 Kg
4	Biophotometer Geneva Jenway Uk
5	Centrifuge Machine bench type with different routs. Allegro 64R speed 30,000 rpm, temperature 20°C to 40°CBackmen
6	Centrifuge Machine with angle router, Germany
7	Circulating water bath with thermo stirrer capacity
8	Colorimeter, Model No. 6051 with eight filter & hundred No. cell jenway UK
9	Conductivity Meter, Jenway UK
10	Deionizer, Elga Uk
11	Drying Oven, Carbolite UK
12	Electrode saturated calomel
13	Electrode silver/silver chloride
14	Fermentor with all accessories, Bio-Tron
15	Flame photometer, Jenway UK
16	Flame photometer, Jwenway UK
17	Furnace 1200°C, Germany
18	GC with Detector
19	Heating block HB-series with two blocks
20	Homoginizer, Germany
21	HPLC, Waters
22	Hybridization oven/shaker for 2 bottle, Model #130H Make Stuart scientific UK

23	Incubator, Binoer Germany
24	Leica Microscope, DM2500 stand 12v,100w
25	Magnetic Stirrer/Hotplate
26	Melting point apparatus, UK
27	Microscope, Germany (Hund)
28	Mini gel electrophoresis system
29	PCR system
30	pH Conductivity /TDS Meter Uk make
31	pH Meter, Jenway UK
32	Rotary evaporator with water bath.
33	Shaker machine with both model WB-14 made in German
34	UV/VIS spectrophotometer, Parma space shimadzu Japan
35	Vacuum pump, Doa-USA
36	Volumetric titrating digital burette, Germany
37	Water bath circulating, Univelia Electronic
38	Water distillation apparatus, Elga
39	Water purification system

Multimedia: Each department has now been provided with 01 Multimedia and 01 overhead projector. The technical assistance of DIT is available for support.

Website: An informative and dynamic website is designed, hosted at our own registered domain URL address <http://www.uob.edu.pk>. All the information regarding new activities and examination results updated on daily basis. The link of Digital Library provided by HEC is also presented and updated.

There is a computer laboratory with PCs and internet facility.

Internet Facility: The internet facility is available in all laboratories, library and offices of teachers. A large number of international research journals are also available on Digital Library provided by Higher Education Commission and research article of interest can be down loaded.

All Scholar and faculty members have adequate access to manuals / documentation

Short Comings:

- a) The Laboratory lacks the following facilities;
- b) Fuming cupboard
- c) All labs need fire extinguisher apparatus in case of emergency
- d) Fire-Alarm
- e) Glass-Blowing section

Each laboratory doesn't have laboratory attendant to assist and support the Scholar and faculty. However, technicians may be required for long-term maintenance of equipments.

Computing Facilities:-

- a) The University of Balochistan has adequate computer facilities / services and administrative staff to support its faculty, Scholar and staff in their academic activities.
- b) All labs are maintained and managed by Directorate of CASVAB Scholars of the CASVAB must have adequate support to complete the program in a timely manner and must have ample opportunity to interact with their instructors and receive timely advice about program requirements and career alternatives.



Faculty of Pharmacy & Health Sciences

- Pharmaceutics
- Pharmacology
- Pharmacy Practice





FACULTY OF PHARMACY & HEALTH SCIENCES

Introduction:

- Pharmacy is the health profession that links the health sciences with the chemical sciences, and it is charged with ensuring the safe use of medication. The scope of Pharmacy practice includes more traditional roles such as compounding and dispensing medications, and it also includes more modern services related to patient care, including clinical services, reviewing medications for safety and efficacy, and providing drug information.
- The significance of Pharmacy profession and the role of Pharmacists in uplifting health care system have been well established and acknowledged all over the world. The Pharmacy profession is well known as a “Life Saving Profession”. The major emphasis of the World Health Organization (WHO) in the developing countries is to provide prompt and economical means for caring human health. This noble task cannot be achieved without Pharmacists because they are the only ones who know about drugs and related substances.
- Faculty of Pharmacy was established in 1980 and due to high demand of its graduates; it is one of the most sought after discipline. It is very well staffed and equipped. Due to its high standard it is recognized by Pakistan Council of Pharmacy.

Objective:

- To prepare professional and focused pharmacists for the provision of high level pharmacy services in a range of services.
- To provide an opportunity to students to acquire specialized knowledge and skills in pharmacy practice.
- To provide qualified and focused professionals in the subject of pharmacy to meet the needs of health care system, clinical pharmacy, industry and society.
- To prepare researchers to meet the needs of industry and research organization as community pharmacist, science and technology.
- To impart knowledge of major disciplines of pharmacy, enabling the students to understand the principles of organization and inter-relationship in health with particular references to pharmacy.
- To teach different methods for exploration, investigation, organization formulation of data and its utilization in practical life, particularly in health field.
- To equip students with knowledge and skill for better planning and management of Hospital Pharmacy, Clinical Pharmacy, Community Pharmacy and Health Medicine.
- To provide education programs, which encourage students to think creatively Medical Sales Officer, Medical Sales Representative etc.

Faculty Member:

The faculty will comprise of the following departments with Faculty members and relevant subjects:

S.No	Name	Designation
1.	Dr. Shafi Muhammad	Dean, Faculty of Pharmacy & Health Sciences

DEPARTMENT OF PHARMACEUTICS:

S.No	Name	Designation	Qualification
1.	Mr. Ghulam Razaque Shahwani	Chairperson / Asstt: Prof.	M.Phil
2.	Dr. Naheed Haque	Assistant Professor	PhD
3.	Dr. Syed Umer Jan	Assistant Professor	PhD
4.	Mrs. Tahmina Rabani	Assistant Professor	M.Phil
5.	Dr. Qaiser Iqbal	Lecturer	M.Phil
6.	Dr. Ghulam Mustafa Shahwani	Lecturer	M.Phil

DEPARTMENT OF PHARMACOLOGY:

S.No	Name	Designation	Qualification
1	Dr. Marvi Baloch	Lecturer/ Chairperson	Ph.D
2	Mr. M. Younis	Assistant Professor	M.Phil
3	Dr. Marvi Baloch	Assistant Professor	M.Phil
4	Dr. Zainab	Lecturer	M.Phil
5	Dr.Faria Khursheed	Lecturer	M.Phil
6	Haroon Arshad	Lecturer	M.Phil

DEPARTMENT OF PHARMACY PRACTICE:

S.No	Name	Designation	Qualification
1	Dr. Fahad Saleem	Associate Professor/ Chairperson	PhD
2	Dr. Noman-ul-Haq	Assistant Professor	PhD
3	Mr.Nafees Ahmed	Lecturer	PhD

Program

- M.Phil in (Pharmaceutics, Pharmacology, Pharmacognosy, Pharmacy Practice) by approved criteria of HEC (courses detail available on UoB website).
- PhD in (Pharmaceutical & Pharmacy Practice) by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to Doctor Of Pharmacy are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD

- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

Job/Career Opportunities:

- Pharmaceutical care in health systems and community environment where appropriate medication usage and patients safety is paramount.
- Pharmaceutical industry and its quality systems.
- Academia, research and development.

SEMESTER BREAK UP

M.Phil Pharmaceutics

Course code	Title	Credit Hours
Semester I		
PCEU-801/Paper-1	Advance Pharmaceutics	3+1
PCEU-802/Paper-2	Biopharmaceutics	3+1
PCEU-803/Paper-3	Pharmaceutical Microbiology	3+1
Semester II		
PCEU-804/Paper-4	Formulation and Product Development	3+1
PCEU-805/Paper-5	Future Trends in Drug Delivery System	3+1
PCEU-806/Paper-6	Biostatistics	2
PCEU-807/Paper-7	Basic of Research Methodology	2
Semester III & IV		
Research in Pharmaceutics		6
Total Credit Hours		30

M.Phil Pharmacology

Course code	Title	Credit Hours
Semester I		
PCOL-841/Paper-1	General Pharmacology and Cardiovascular System	3+1
PCOL-842/Paper-2	Biochemical Pharmacology and Biochemical Techniques	3+1
PCOL-843/Paper-3	Neurosycho pharmacology	3+1
Semester II		
PCOL-845/Paper-4	Chemotherapy	3+1
PCOL-846/Paper-5	Pharmaceutical Microbiology	3+1
PCOL-847/Paper-6	Biostatistics	2
PCOL-848/Paper-7	Basic of Research Methodology	2
Semester III & IV		
Research in Pharmacology		6
Total Credit Hours		30

M.Phil Pharmacy Practice

Course code	Title	Credit Hours
Semester I		
PPRAC-881/Paper-1	Scope & Development of Pharmacy Practice & Pharmacy Systems	3+1
PPRAC-882/Paper-2	Medical Sociology & Ethics in Pharmacy Practice	3+1
PPRAC-883/Paper-3	Pharmaceutical Care and Pharmacy Management	3+1
Semester II		
PPRAC-884/Paper-4	Basic Clinical Pharmacy and Measuring & Regulating Medicines Use	3+1
PPRAC-885/Paper-5	Drug information and Pharmaceutical Marketing	3+1
PPRAC-886/Paper-6	Biostatistics	2
PPRAC-887/Paper-7	Basic of Research Methodology	2
Semester III & IV		
Research in Pharmacy Practice		6
Total Credit Hours		30

PhD Pharmacy Practice

Course code	Title	Credit Hours
Semester I		
PPRAC-901/Paper-1	Advance Pharmaceutical Care	3
PPRAC-902/Paper-2	Advance Patient Counseling & Communication and Clinical Research	3
PPRAC-903/Paper-3	Role of Clinical Pharmacist in Measuring and Regulating Medicines Use	3
Semester II		
PPRAC-904/Paper-4	Drug Therapy Review And Drug Utilization Evaluation	3
PPRAC-905/Paper-5	Interpretation of Clinical Laboratory Data (Review of Laboratory and Diagnostic Tests)	3
PPRAC-906/Paper-6	Research Methodology	3
Semester III, IV, V & VI		
Research in Pharmacy Practice		6
Total Credit Hours		24

Facilities:**Teaching Laboratories:**

The Faculty of Pharmacy has 6 well-equipped and modern laboratories along with the supporting staff to cater the needs of Pharmacy students. Research Laboratory.

A separate well equipped laboratory will be developed for M.Phil and Ph.D students

Computer Lab:

Computer laboratory is established which can be used by students and research scholars of the Faculty

Industrial Lab:

The faculty of Pharmacy has established a well equipped and modern industrial lab for students Graduates and researchers.

Faculty Library:

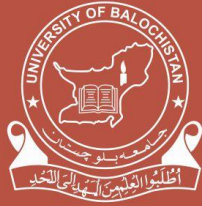
The Faculty library is managed by a qualified librarian and has over 800 books covering a wide range of disciplines in Pharmacy for teaching and research purposes. These books are in addition to more than 1000 titles of Pharmacy books stocked in Central library of the University. The Faculty library also has a vast collection of International Research Journals. A complete list of these Journals can be obtained from the librarian.

Internet Facility:

The internet facility is also available in all laboratories and library number of International research journals are available on Digital Library provided by Higher Education Commission and research articles of interest can also be downloaded.

Microbiology Research Laboratory:

A separate well equipped Laboratory has been developed for subject of Microbiology and higher research students.



Faculty of Management Sciences, Business & information Sciences

- Commerce
- Institute of Management
Science
- Economics
- Computer Science & IT





DEPARTMENT OF COMMERCE

Introduction

- The department of Commerce has been evolved as one of the flagship departments of University of Balochistan. The department has been instrumental in providing the young learners with a profound understanding of theoretical and practical aspects of the Commerce as a discipline and a real life phenomenon. Since Inception (1973) the department has crossed milestones of its growth and development. Starting with undergraduate studies, the department has gradually built B.com and M.Com programs. Currently, M.Phil and PhD program have also been structured to cater the need of Balochistan in area of Commerce & Business. The department unfolds viable educational environment that tend to fester both research and analysis skills of the students. Seminars, debates, dialogues, and workshops have been conducted by the department to develop cadres of quality human resource in the domain of commerce, industry and business at local, national and international levels.
- Leadership and faculty of the department are seeking ways to enable the students to be the business leaders, Managers, Entrepreneurs, Bankers etc. of tomorrow, this approach would definitely lead students towards their targeted job market and make their way clear towards the destination of professionalism. Alumni record validates that major portion of provincial workforce in the business and banking sectors have already been graduated from Department of Commerce, UOB, either at bachelor levels or Master levels.

Objectives

- To provide updated, well informed and fresh knowledge base through up-dating the curriculum of the study programs so that to meet the leading regional and global challenges and harness the opportunities opening in the wake of China-Pakistan Economic Corridor (CPEC) at national and particularly provincial level.
- To develop an environment stemmed in learning and education of the commerce and business for cadres of students from diverse backgrounds so that high quality of human resource could be created through opening study programs of B.S (four year program), M.com program, M Phil and PhD programs.

Jobs/Career Opportunities

- Alumni of the Department of Commerce are currently being engaged in different fields of public and private sector like NGOs, Education, Business, and Banking etc. hence commerce students may seek career/job in following areas:
 - Accounting and Finance Fields
 - Taxation management
 - Entrepreneurship
 - Business
 - Banking
 - NGOs
 - Public and Private Organizations
 - Audit Department
 - Commerce Education Organizations

- Industry and Commerce

Faculty

S.No.	Name	Designation	Qualification
1	Prof. Dr. Nadeem Malik	Dean, Faculty of Management Science, Business & IT	PhD
2	Mr. Inayatullah Khan	Assistant Professor/ Chairperson	M.Phil
3	Mrs. Shakira Bukhari	Assistant Professor	MPhil
4	Dr. Uzma Mukhtar	Assistant Professor TTC	PhD
5	Dr. Muhammad Shafiq	Lecturer	PhD
6	Syed Jameel Ahmed	Lecturer	MBA/ MS (Reg)
7	Mr. Dilawar Khan Durrani	Lecturer	MBA/ PhD (Reg)

Programs

- M.Phil in Commerce by approved criteria of HEC (courses detail available on UOB website).
- Ph.D in Commerce by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc./ D.Com/ ICS (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc./MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- M.Phil degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil

1.HUMAN REOSURCE MANAGEMENT	
COM-705	Strategic Human Resource Management
COM-706	International Human Resource Management
COM-707	Stress Management
COM-708	Strategic Leadership
COM-709	Organizational Conflict Management
COM-710	Performance Management

COM-711	Personnel Policies
COM-712	Knowledge Management
COM-713	Personnel Finance
COM-714	T&D

2.FINANCE	
COM-715	Advanced Corporate Finance
COM-716	Financial Statement Analysis
COM-717	Project Financing
COM-718	Financial Risk Management
COM-719	Advance Managerial Accounting
COM-720	Advance Portfolio Management
COM-721	Financial Derivatives
COM-722	Investment Analysis

3.	Marketing	4.	Entrepreneurship
COM-723	International Marketing Management	COM-731	Entrepreneurship & SMEs
COM-724	Advertising Management	COM-732	Entrepreneurial Finance
COM-725	Sales Management	COM-733	Advanced Corporate Entrepreneurship & Innovation
COM-726	Strategic Brand Management	COM-734	Entrepreneurial Marketing
COM-727	Marketing of Services	COM-735	International Entrepreneurship
COM-728	Export Marketing		
COM-729	E-Marketing		
COM-730	Advanced Marketing Research		

Ph.D(Commerce) Program Structure

A total of 18 credit hours must be earned comprising of the followings:

Category	Courses xCredit Hours
Three Core Courses	03x03
Three Electives	03x03
Total	18

Ph.D(Commerce) Semester Plan

Semester 1

Code	Course title	Credit Hours
COM-801	Advance Research Methodology (Core)	3(3-0)
COM-802	Business in Asia and Strategies for Emerging	3(3-0)
	Elective I	3(3-0)
	Total	09

Semester 2

Code	Course title	Cr Hr
COM-803	Advance Econometrics (Core)	3(3-0)
	Elective II	3(3-0)
	Elective III	3(3-0)
	Total	09

Research work: Satisfactory completion of Course work will be followed by the research work

ELECTIVES

1. HUMAN RESOURCE MANAGEMENT

Code	Course Title	Credit Hours
COM- 804	Global Issues in Human Resource Management	3(3-0)
COM- 805	Advanced SHRM	3(3-0)
COM-806	Human Resource Management in service sector	3(3-0)
COM- 807	HR Issues in Mergers and Acquisitions	3(3-0)
COM- 808	Workplace Diversity Issues	3(3-0)
COM- 809	Cross-Cultural Behavior ,Conflicts and Negotiations	3(3-0)
COM-810	Competitive Human Resource Strategies in Developing Countries	3(3-0)

2. MARKETING

Code	Course Title	Credits Hours
COM- 811	Cross-Cultural Buyer Behavior and Negotiations	3(3-0)
COM- 812	Business in Asia and Strategies for Emerging Market	3(3-0)
COM- 813	Creating and Delivering Value in Marketing	3(3-0)
COM- 814	Advanced International Marketing, Trade, and Export Management	3(3-0)
COM- 815	International Advertising	3(3-0)

3. FINANCE & ACCOUNTING

Code	Course Title	Credits Hours
COM- 816	Advanced International Financial Management	3(3-0)
COM- 817	Advanced Financial Reporting	3(3-0)
COM- 818	Current Research in Financial Accounting	3(3-0)
COM- 819	Advanced Financial Audit and Assurance	3(3-0)
COM- 820	Global Financial Markets	3(3-0)
COM- 821	Currency Markets, Exchange Risk, and Currency Derivatives	3(3-0)

INSTITUTE OF MANAGEMENT SCIENCES

Introduction

- The leading economic, cultural and environmental changes at global level have largely impacted nations and societies all over the world. The free market economy and trade liberalization policies have figured out the need of modern institutional networks that seeks for highly efficient and vigilant management systems at different public and private sector institutions. While zooming in the emerging situation and peculiar challenges and opportunities in Pakistan generally and Balochistan especially, the discipline of management sciences need to be highly responsive and relevant to the needs of the people.
- The inception of IMS in 2000 was aimed to impart quality education in management and administration to strengthen the human resource base in Balochistan. The Institute started its journey with the name of Department of Administrative Sciences in 1989 and Mr. Muhammad Hassan Shaikhwa led as the first Chairman of the department. The department was upgraded to the Institute of Management Sciences on 2000.
- The IMS has established high quality of study programs, research, analysis and practice environment and since inception has created cadres of high quality of HR that are contributing in various institutions as leaders, managers and administrators.

Objectives

- To design and develop programs that can fulfill the need of producing quality human resource in the fields of specialized functional areas of management sciences, including management information systems and to develop cadres of conceptually and technically equipped professionals in Management Sciences who can contribute as leaders, managers and creators of the management systems and institutions in the public and private sectors organizations.
- To develop human resource for undertaking applied and synthesizing research ventures, in-depth analysis and practical skills for responding on the basic issues, challenges and opportunities of economy, commerce, and services at various public and private sectors.

Job/Career Opportunities

- Private and Public Sectors Organizations.
- Financial Institutions.
- Insurance Companies.
- Local and Multinational NGOs.

Faculty

S.#	Name	Designation	Qualification
1	Dr. Abdul Naeem	Director/ Assistant Professor	Ph.D
2	Dr. Jan Muhammad	Associate Professor	Ph.D
3	Dr. Zainab Bibi	Associate Professor	Ph.D
4	Dr. Sana-ur-Rehman	Assistant Professor	Ph.D
5	Dr. JehanwashKarim	Assistant Professor	Ph.D
6	Dr. Saubia Ramzan	Assistant Professor	Ph.D
7	Dr. Jameel Ahmed	Assistant Professor	Ph.D
8	Dr. Kaneez Fatima	Assistant Professor	Ph.D
9	Dr. Kamal Badar	Assistant Professor	Ph.D
10	Dr. SafiaBano	Assistant Professor	Ph.D
11	Dr. Beenish Malik	Lecturer	Ph.D
12	Dr. Saud-al-Taj	Lecturer	Ph.D
13	Dr. Muhammad Kashif	Lecturer	Ph.D
14	Malik Abdul Karim	Assistant Professor	M.Phil
15	Mr. M.K.Bhatti	Assistant Professor	M.Phil
16	Mr. Sulaiman Akbar	Assistant Professor	MS
17	Mr. Abdul Wahid Zehri	Lecturer	MS
18	Mrs. Fouzia Sheikh	Lecturer	MS
19	Ms. Farae Naeem	Assistant Professor	MS
20	Mr. Muhammad Danish	Lecturer	MS
21	Mr. Zubair Sharif	Lecturer	MS
22	Mr. Muhammad Naeem	Lecturer	MS
23	Mr. Khurram Shahzad	Lecturer	MS
24	Mr. Furqan-ul-Haq	Lecturer	MS
25	Mr. Muhammad Kaleem	Lecturer	MS
26	Mr. Nageebullah	Lecturer	MS

Programs

- Scholar's for MS/Ph.D. degrees has to complete the requisite number of credit hours for course work as laid down in Higher Education Commission regulations for the said degrees (courses detail available on UOB website). The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility Criteria

- The applicant seeking admission in MS program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc./MCS/B.Sc. (Hons.) are also eligible for admission in MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- MS degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with

the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

SEMESTER I

S.No	Code	Course	Category
1.	MS-501	Statistics for Management	Core-UG
2.	MS-502	Business Communication	Core-UG
3.	MS-503	Financial Accounting	Core-UG
4.	MS-504	Principles of Management	Core-UG
5.	MS-505	Marketing Management	Core-UG

SEMESTER II

1.	MS-506	Financial Management	Core-UG
2.	MS-507	Organizational Behavior	Core-UG
3.	MS-508	Human Resource Management	Core-UG
4.	MS-509	Business Research Methods	Core-UG
5.	MS-510	Business Economics	Core-UG

SEMESTER III

SEMESTER V

Thesis

Core-UG = Undergraduate Level Courses; Core-G = Graduate Level Courses

PROPOSED SEMESTER-WISE BREAKUP FOR MS PROGRAM FOR STUDENTS WITH 16 YEARS OF RELEVANT BUSINESS EDUCATION (e.g., BBS and BBA)

S.No	Code	Course	Category
SEMESTER I			
1.		Core Course I	Core-G
2.		Core Course II	
3.		Elective I	
4.		Elective II	Core-G
SEMESTER II			
1.		Core Course III	Core-G
2.		Core Course IV	
3.		Elective III	
4.		Elective IV	Core-G

SEMESTER III

Thesis

Core-G = Graduate Level Courses

Note:

1. Minimum of Four Core courses will be selected from the pool of available core courses.
2. Maximum of Four elective/Specialization courses will be selected from the pool of available elective courses.
3. The selection of (core and elective) courses will be contingent on the availability of teachers in the relevant field.

LIST OF COURSES

1. MS DEFICIENCY COURSES FOR STUDENTS WITH 16 YEARS OF NON RELEVANT BUSINESS EDUCATION (Undergraduate Level Courses)

- | | | |
|----|--------|---------------------------|
| 1 | MS-501 | Statistics for Management |
| 2 | MS-502 | Business Communication |
| 3 | MS-503 | Financial Accounting |
| 4 | MS-504 | Principles of Management |
| 5 | MS-505 | Marketing Management |
| 6 | MS-506 | Financial Management |
| 7 | MS-507 | Organizational Behavior |
| 8 | MS-508 | Human Resource Management |
| 9 | MS-509 | Business Research Methods |
| 10 | MS-510 | Business Economics |

2. List of Core Courses (Graduate Level Courses)

- | | | |
|----|--------|--|
| 1 | MS-601 | Advanced Research Methods |
| 2 | MS-602 | Multivariate Data Analysis |
| 3 | MS-603 | Advanced Qualitative Research |
| 4 | MS-604 | Strategic Management and Business Policy |
| 5 | MS-605 | Strategic Marketing |
| 6 | MS-606 | Global Marketing Management |
| 7 | MS-607 | Production and Operations Management |
| 8 | MS-608 | Entrepreneurship and Small Business Management |
| 9 | MS-609 | Strategic Finance |
| 10 | MS-610 | Financial Risk Management |
| 11 | MS-611 | Strategic Human Resource Management |
| 12 | MS-612 | Ethics and Corporate Social Responsibility |

3. MS Elective/Specialization Courses (Graduate Level) FINANCE

- | | | |
|---|---------|------------------------------------|
| 1 | MS-621 | Entrepreneurial Finance |
| 2 | MS-622 | Managerial Accounting |
| 3 | MS-623 | Financial Engineering |
| 4 | MS-624 | Portfolio Management |
| 5 | MS-625 | Islamic Banking and Finance |
| 6 | MS-626 | Project Financing |
| 7 | MS-627 | Financial Reporting and Analysis |
| 8 | MS- 628 | International Financial Management |

4. MARKETING

- | | | |
|---|--------|------------------------------------|
| 1 | MS-631 | Relationship Marketing Management |
| 2 | MS-632 | Integrated Marketing Communication |
| 3 | MS-633 | Online Marketing |
| 4 | MS-634 | Sales Management |
| 5 | MS-635 | Advanced Consumer Behavior |
| 6 | MS-636 | Strategic Brand Management |
| 7 | MS-637 | Advanced Marketing Research |
| 8 | MS-638 | Readings in Marketing Management |
| 9 | MS-639 | Marketing Channels |

5. HUMAN RESOURCE MANAGEMENT

- | | | |
|---|--------|---|
| 1 | MS-641 | International Human Resource Management |
| 2 | MS-642 | Recruitment and Selection |
| 3 | MS-643 | Leadership |
| 4 | MS-644 | Performance Management |
| 5 | MS-645 | Training and Development |
| 6 | MS-646 | Career Management |
| 7 | MS-647 | Perspectives in Dispute Resolution |

6. GENERAL MANAGEMENT

- | | | |
|---|--------|---|
| 1 | MS-651 | Total Quality Management |
| 2 | MS-652 | Operations Research |
| 3 | MS-653 | Small Business Management |
| 4 | MS-654 | Organization Theory and Design |
| 5 | MS-655 | Managerial Economics |
| 6 | MS-656 | Contemporary Issues in Governance and Public Management |
| 7 | MS-657 | Contemporary Issues in Management |
| 8 | MS-658 | Knowledge Management |
| 9 | MS-659 | Organizational Development |

1. RESEARCH METHODOLOGY

- | | | |
|---|--------|--|
| 1 | MS-661 | Econometrics |
| 2 | MS-662 | Mixed Methods Research |
| 3 | MS-663 | Experimental Designs for Social Sciences |

PhD:

List of Core Courses

- | | | |
|---|---------|--|
| 1 | PhD-701 | Strategic Career Management |
| 2 | PhD-702 | Human Capital Management |
| 3 | PhD-703 | Consumer Psychology |
| 4 | PhD-704 | Customer Relationship Management |
| 5 | PhD-705 | Comparative Corporate Governance |
| 6 | PhD-706 | Issues in Organizational Decision Making |
| 8 | PhD-707 | Organizational Change Management |

List of Elective Courses

Human Resource Management

1	PhD-711	Motivation and Leadership
2	PhD- 712	Succession Planning and Management
3	PhD-713	Talent Management
4	PhD-714	Advanced Compensation Management
5	PhD-715	Network Analysis
6	PhD-716	Positive Organizational Behavior

MARKETING

1	PhD-721	Developing A Critical Understanding of Marketing
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MANAGEMENT

2	PhD-722	Advanced International Marketing
3	PhD-723	Marketing Decision Models
4	PhD-724	Consumer Decision Making
5	PhD-725	Public Relations

RESEARCH METHODOLOGY

1	PhD-731	Financial Econometrics
2	PhD- 732	Event History Analysis
3	PhD-733	Psychometrics
4	PhD-734	Development of Research Proposal
5	PhD-735	Independent Study
6	PhD-736	Book Review
7	PhD-737	Report Writing
8	PhD-738	Qualitative Interviewing
9	PhD-739	Design of Observational Studies
10	PhD-740	Questionnaire Designs
11	PhD-741	Experimental Designs
12	PhD-742	Systematic Literature Review

Facilities

- **Access to Computer:** The institute has two laboratories equipped with almost 50 computers with internet and latest software facilities. The technical staff strives to technically support students in exploring their required academic and research stuff and assignments and analysis.
- **Departmental Library:** The Departmental Library is managed by a qualified librarian and has a large collection of latest books, research journals, periodicals and magazines covering a wide range of disciplines in Management Sciences for teaching and research purposes.
- **Audio Visual Aids:** A seminar room equipped with all the modern facilities including slides, overhead projector, Portable multimedia, T.V. and V.C.R.
- **Provision of WI-FI Connections:** Department tends to provide free access to WI-FI for all students enrolled in the department.

DEPARTMENT OF ECONOMICS

Introduction

- Incepted in 1971, the Department of Economics is one of the initial departments of University of Balochistan which has evolved from the experiences carried out at government degree college Quetta. The need of establishing this department was highly felt at various levels. The contribution of department at various levels has always validated the need and rational of this very important discipline in the province.
- As a discipline of social sciences, Economics tends to seek and explore the relationship between needs and scarce means which have alternative uses. Economics is the study of general principals of administration of resources, of an individual, a household, a business, or a State; this also includes the examination of the way in which waste arises in all such administration. Economic phenomenon or activity means every systematic Endeavour to satisfy a material need, or more precisely one which seeks with the available means to achieve the best possible results, or a given result with the least possible means.
- In the course of consistent 55 years, the department has built viable academic and research systems, highly skilled and intellectual recognized faculty, trained and educate thousands of the young economists at provincial and national levels.

Objectives

- To foster a viable research, teaching and practice environment in the department that can potentially promote learning through quality teaching and research, while encouraging mutual respect, tolerance and sensitivity at society.
- To prepare economic practitioners and researchers that can contribute in shifting the paradigm of economics at national and provincial levels while working with public and private sector organizations and institutions.

Job/Career Opportunities

- Provincial & federal public sector departments; Planning & Development, Irrigation, Agriculture, Industries, Finance, Trade & Commerce
- Financial Institutions & organizations such as; Planning Commission, State Bank, Commercial Banks, Zari-Taraqiathi Bank, Micro Finance Banks, Development Financial institutions PICIC, TDAP, BOI, Research Institutes
- Private Sector Organizations
- Bilateral and Multilateral International Development Donor Organizations e.g. World Bank, UNDP, JICA, CIDA, etc.
- NGOs (local, national and international)

Faculty Members: (Please update qualifications and develop an order with respect to academic achievements made by the persons)

S.#	Name	Designation	Qualification
1	Mrs. Riffat Arshad	Assistant Professor / Chairperson	Ph.D Scholar
2	Dr. Jahangir Khan	Associate Professor/TTS	Ph.D (Economics)
3	Mr. Abdul Rehman	Lecturer (on Study Leave)	PhD scholar in UK.
4	Mr. Arbab Jahandad	Lecturer	M.Phil Scholar
5	Mr. Gohar Khan	Lecturer	M.Phil Scholar
6	Mr. Muhammad Ayaz	Lecturer	M.Phil(Economics) From Applied Economics Research Centre
7	Mr. Asmat Khan	Lecturer	M.Phil

Programs

- Scholar's for M.Phil./Ph.D. degrees has to complete the requisite number of credit hours for course work as laid down in Higher Education Commission regulations for the said degrees (courses detail available on UOB website). The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility Criteria

- The applicant seeking admission in M.Phil program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc./MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- M.Phil/MS degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP **MAJOR COURSES**

S/No	Course Code	Course Title	Credit Hours
1	ECON-701	Advanced Microeconomics	3(3.0)
2	ECON-702	Advanced Macroeconomics	3(3.0)
3	ECON-703	Econometrics	3(3.0)
4	ECON-704	Research Methodology	3(3.0)
		Total	<u>12</u>

MINOR COURSES

S/No	Course code	Course Title	Credit Hours
1	ECON-705	Issues in Pakistan Economy	3(3-0)
2	ECON-706	Natural resource and environmental economics	3(3-0)
3	ECON-707	Public Sector economics	3(3-0)
4	ECON-708	Monetary Economics	3(3-0)
5	ECON-709	Development Economics	3(3-0)
6	ECON-710	Selected topics in International economics	3(3-0)
7	ECON-711	Agricultural economics	3(3-0)
8	ECON-712	Human resource development	3(3-0)
9	ECON-713	Multivariate Analysis	3(3-0)
10	ECON-714	Advance econometrics	3(3-0)
11	ECON-715	Portfolio management and investment analysis	3(3-0)
12	ECON-716	Economics of Finance	3(3-0)
		Total	36

Facilities

- **Reference Library:** The department has developed a full fledged library that timely facilitates all the students enrolled in different programs. The library is named after Prof. Shukarullah who is one amongst the architects of this department. Qualified librarians support students with above 3000 books available on economic and other interdisciplinary subjects. A large number of international research journals are also available on the digital library. Journals of reputed national institutions.
- **Internet and ICT.** Department provides learning and practice of Information and Communication Technology especially its applications in the field of economics. Free access to WI-FI networks is also facilitated by the department.

DEPARTMENT OF COMPUTER SCIENCES & INFORMATION TECHNOLOGY

Introduction

- The advent scientific advancement has rendered an overarching change in the lives of people all over the world. The process of continuous inventions in the field of computation has brought a revolution in communication, trade, business, war, education, health, and access to the knowledge of other planets and heaven bodies in our solar system. After the devastating World War II, the discipline of computer science figures out from the outgrowth of the Physics. Incepted in 1948, this discipline has taken several giant leaps; the birth of personal computers in the 1970's has geared up the use of Information and communication technologies all over the world.
- The emergence of Computer science as a discipline has taken a central position in the educational and development paradigms of the developing countries generally and Pakistan especially. The emerging socio-economic opportunities demands a responsive system and skilled human resources. In the recent years, China-Pakistan Economic Corridor (CPEC) demand slots of highly qualified and skilled human resource to excel the growth and prosperity of the country. The youth of Balochistan, particularly needs to be trained to contribute in the process of development and socio-economic empowerment.
- University of Balochistan launched the department of computer science in 2000. Starting with, Master in Computer Sciences (MCS) in 2001, the department also initiated its programs of BS (CS) and BS(IT) in 2002. In the course of a decade, the department has harnessed its faculty and study programs and has started M.Phil and PhD programs in 2012.

Objectives:

- To design and develop effective study programs for creating cadres of highly potential and qualified professionals in the field of Computer Science (CS) and Information Technologies (IT) so that emerging demands of HR at the level of national provincial level public and private sectors could be fulfilled.
- To develop an academic and research environment at the department that will generate innovative learning and practicing ventures in the field of computer science and ICTs and will inculcate an academic culture aimed at professional grooming and creative thinking.

Job/Career Opportunities

- I.T based services, Commercial and financial public and private organizations.
- Computer Hardware/Software suppliers/users in public/private sector.
- Telecom Sector.
- Multi-National Companies.

4. Faculty Members:

S.#	Name	Designation	Qualification
1	Dr. Ihsan Ullah	Assistant Professor/ Chairperson	Ph.D
2	Dr. Altaf Hussain Bouk	Professor	Ph.D
3	Dr. Atiq Ahmed	Assistant Professor	Ph.D
4	Dr. Uzma Mukhtar	Assistant Professor	Ph.D
5	Dr. Waheed Noor	Assistant Professor	Ph.D
6	Dr. Maheen Bakhtyar	Assistant Professor	Ph.D
7	Dr. Junaid Babar	Assistant Professor	Ph.D
8	Dr. Abdul Basit	Assistant Professor	Ph.D
9	Dr. Mir Saadat Baloch	Assistant Professor	Ph.D
10	Mr. Muhammad Khalid Badini	Assistant Professor	MS(CS)
11	Mr. Syed Mohammad Zubair	Assistant Professor	MS
12	Mr. Imran Ali	Lecturer	MS

Programs

- Scholar's for M.Phil./Ph.D. degrees has to complete the requisite number of credit hours for course work as laid down in Higher Education Commission regulations for the said degrees (courses detail available on UOB website). The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility Criteria

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc./MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- M.Phil/MS degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

MS(CS)

Course Code	Semester I	Credit Hours
	Course Name	
CS-702	Advanced Algorithms and Analysis	3.0
CS-704	Advanced Theory of Computation	3.0
CS	ELECTIVE I	3.0
CS	ELECTIVE II	3.0

	Total	12
	Semester II	
Course Code	Course Name	Credit Hours
CS	ELECTIVE III	3.0
CS	ELECTIVE IV	3.0
CS	ELECTIVE V	3.0
CS	ELECTIVE VI	3.0
	Total	12
	Semester III	
Course Code	Course Name	Credit Hours
	Thesis part I Topic registration Research proposal/synopsis submission Topic defense	3.0
	Total	3
	Semester IV	
Course Code	Course Name	Credit Hours
	Thesis part II Carrying out the research Writing and submitting of thesis Thesis defense	3.0
	Total	3

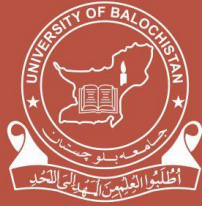
P.hD

	PhD (CS)	
	Semester I	
Course Code	Course Name	Credit Hours
CS	ELECTIVE I	3.0
CS	ELECTIVE II	3.0
CS	ELECTIVE III	3.0
	Total	9
	Semester II	
Course Code	Course Name	Credit Hours
CS	ELECTIVE IV	3.0
CS	ELECTIVE V	3.0
CS	ELECTIVE VI	3.0
	Total	9
	Semester III	
	Thesis Supervisor Selection Topic registration Research proposal/synopsis submission Synopsis defense	

	Semester IV, V and VI	
	Thesis Carrying out the research Publications Writing and submitting of thesis Thesis defense	

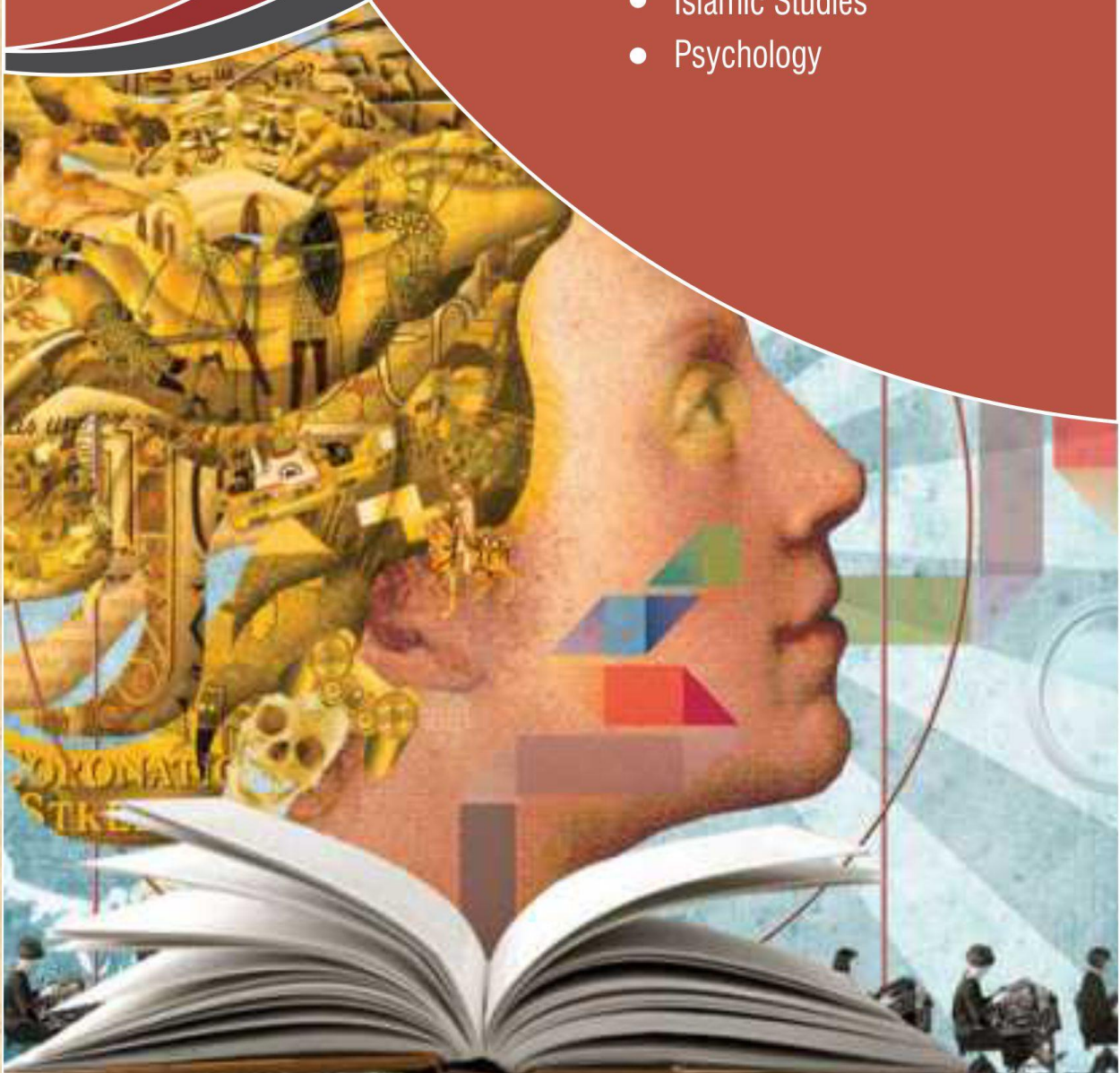
Facilities

- **Departmental Library:** The departmental library has over 1500 books covering a wide range of disciplines in computer science & information technology for teaching and research purpose.
- **Internet Facility:** The internet facility is also available in all Computer Labs & Teaching Offices. A large number of research journals are also available on Digital Library provided by HEC and research articles of interest can also be downloaded.



Faculty of Education & Humanities

- History
- Islamic Studies
- Psychology





DEPARTMENT OF HISTORY

Introduction

- History is the study of the past based on findings, evaluation, and interpretation recorded evidence. It is a discipline that seeks both to understand the past in its own term and to explain the present in light of the past for the future guidance. Historical fields are usually defined by period, place, and theme. To know history is to know what people did in the past and why; to simply put, history concern everything that exist or has existed. Students of history learn how to ask pertinent questions to society and to find answer through research and logical thought. Individually as well collectively, they also become able to know how to utilize past experiences better future planning.
- The Department of History, University of Balochistan was established in the year March, 1987. In the first batch M.A programs was delivered. The department has developed developed cadres of high motivated human resource who are serving in the various public and private sector organizations and institutions. Department has now adequately expanded its profile while initiating M.Phil and PhD programs.

Objectives

- To provide qualified and focused in History to meet the future of educational institutes & research organizations.
- To provide educational program this encourages student to think creatively, constructively and to communicate their ideas effectively.

Job/Career Opportunities

- Educational, Research & Teaching Institutions.
- Government Service,
- Civil Service,
- Foreign Service,
- Law
- International Organizations.

Faculty Members:

S.NO	Name	Designation	Qualification
1	Dr. Saeeda Mengal	Assistant Professor/ Chairperson	Ph.D
2	Dr. Kaleemullah Bareach	Professor	Ph.D.
3	Mr. Muhammad Asif	Lecturer	M.Phil
4	Mr. Muhammad Asif Kakar	Lecturer	M.Phil

Programs

- M.Phil in History by approved criteria of HEC (courses detail available on UOB website).
- PhD in History by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS. . Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

Compulsory Course:

Course Code	Course Title	Credit Hours
HIS- 101	Research Methodology	03
HIS- 102	Islamic History and Culture	03
HIS- 103	Philosophy of History & Historiography	03
HIS- 104	History of Balochistan (1666-1947 A.D.)	03
HIS- 105	History of Political and Constitutional Development in Pakistan (1947-1988 A.D.)	03

Optional Course

Course Code	Course Title	Credit
HIS- 106	History of Muslim Nationalism and the Creation of Pakistan	03
HIS- 107	Modern History of Afganistan (1747-1933 A.D.)	03
HIS- 108	History of Classical Europe	03
HIS- 109	New Trends in History	03
HIS- 110	Contemporary World History	03
HIS- 111	History of the United States of America	03
HIS- 112	Mughal Rile in India (1526-1707 A.D)	03

**First Semester
Compulsory Course:**

In first semester all the students, have to take three compulsory course and one optional course.

Course Code	Course Title	Credit Hours
HIS101	Research Methodolgy	3
HIS102	Islamic History & Culture	3
HIS105	History Of Political & Constitutional Development in Pakistan(1947-1988A.D)	3

Total Credit Hours:09

**First Semester
Optional Course**

Course Code	Course Title	Credit Hours
HIS108	History of Classical Europe	3
HIS109	New Trends in History	3

**Second Semester
Compulsory Course:**

In Second semester all the students, have to take two compulsory and two optional course.

Course Code	Course Title	Credit Hours
HIS103	Philosophy of History & Historiography	3
HIS104	History of Balochistan (1666-1947 A.D.)	3

**Second Semester
Optional Course**

Course Code	Course Title	Credit Hours
HIS106	History of Muslim Mationalism and the Creation of Pakistan	3(3-0)
HIS107	Modern History of Afganistan (1747-1933 A.D.)	3(3-0)
HIS110	Contemporary World History	3(3-0)
HIS111	History of the United States of America	3(3-0)
HIS112	Mughal Rile in India (1526-1707 A.D)	3(3-0)

DEPARTMENT OF ISLAMIC STUDIES

Introduction

- The Subject of Islamic Studies mainly entails study of the Quran, Hadith, Fiqh, Islamic History, comparative study of religions and Arabic. It also includes special study of Seerat-u-Nabi, economic and political thought Muslim philosophy & Research Methodology.
- Established in 1973, the department of Islamic Studies has excelled its institutional. Capabilities educate scores of young students from various backgrounds. Prof. Rashid Ahmed (Late) was the first Chairperson of the department. Due to shortage of space in the University Campus, Islamic Studies Department started functioning in Government Science College Quetta. In the Beginning classes used to be held in the evening with the support of part-time teachers. In 1980. In 1981, the department was shifted to the University Campus.
- The department offers study programs in M.A, M.Phil and Ph.D. Students for all the disciplines attend the courses as a regular feature of the department.

Objectives

- To provide qualified and focused professionals in Islamic studies to meet the future needs of educational institutes.
- To produce highly qualified scholars who can contribute in solving contemporary issues faced by the Muslims, like interfaith dialogue, interest free banking, State crafts and other contemporary challenges and to bridge the gap between islam and other religions by providing an understanding of Islam.

Job Opportunities

- Jobs in Educational and research institutes in Pakistan and abroad.
- Civil Service.
- Jobs such as Religious officers, Khatibs etc. in the Armed forces.

Faculty Members

S.#	Name	Designation	Qualification
1.	Dr. Abdul Ali Achakzai	Professor/ Dean (Faculty of Education & Humanities)	Ph. D
2.	Dr. Sahabzada Baz Muhammad	Lecturer/ Incharge of Department	Ph. D
3.	Dr. Abdul Malik Agha	Professor	Ph. D
4.	Dr. Imam-ud-Din	Assistant Professor	Ph.D
5.	Mr. Rehmatullah	Assistant Professor	M. Phil
6.	Mrs. Farah Batool	Lecturer	M. Phil
7.	Mrs. Shabana Qazi	Lecturer	M. Phil
8.	Mrs. Tahira Firdous	Lecturer	M. Phil

Programs

- M.Phil. in Islamic Studies by approved criteria of HEC (courses detail available on UOB website).
- PhD in Islamic Studies by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil:

List of Core Courses

COURSE TITLE	COURSE CODE NUMBER	CREDIT HOURSE
اصول تحقيق	701	3
فهم قرآن	702	3
مطالعه سيرت و فن سيرت نگاری	703	3
علم تفسير ومفسرين	706	3
اسلامی تاريخ و تحريکين	707	3

List of Elective Courses

COURSE TITLE	COURSE CODE NUMBER	CREDIT HOURSE
اللغة العربية	704	3
دعوت و ارشاد	705	3
علوم الحديث	708	3
فقه اور اجتهاد	709	3
اسلام کا نظام تعليم و تربيت	710	3

(1st Semester)

COURSE TITLE	COURSE CODE NUMBER	CREDIT HOURS
اصول تحقیق	701	3
فہم قرآن	702	3
مطالعہ سیرت و فن سیرت نگاری	703	3
کسی ایک مضمون کا انتخاب کریں۔	704	3
1. اللغۃ العربیۃ	705	
2. دعوت و ارشاد		

TOTAL CREDIT HOURS:12

2nd Semester

COURSE TITLE	COURSE CODE NUMBER	CREDIT HOURSE
علم تفسیر و مفسرین	706	3
اسلامی تاریخ و تحریکیں	707	3
علوم الحدیث	708	3
کسی ایک مضمون کا انتخاب کریں۔		3
1. فقہ اور اجتہاد	709	
2. اسلام کا نظام تعلیم و تربیت	710	

TOTAL CREDIT HOURS= 12

3rd & 4rth SEMESTER

- THESIS WRITING

نصاب برائے پی ایچ ڈی (ریگولر) پروگرام

List of Core Courses

COURSE TITLE	COURSE CODE NUMBER	CREDIT HOURSE
فقہ القرآن و الحدیث	801	3
اسلام میں تحقیق کے اصول و مبادی	802	3
اجتہاد اور عصری مسائل	805	3
اسلام اور استشرافی فکر	806	3

Total Core Courses: 04

List of Elective Courses

COURSE TITLE	COURSE CODE NUMBER	CREDIT HOURSE
مصادر علوم اسلامیہ	803	3
اسلام اور سیاسی نظریات	804	3
فقہ السیرۃ اور عصری تحدیات	807	3
اسلام اور تہذیب و تمدن	808	3

Total Elective Courses: 04

1st SEMESTER

COURSE TITLE	COURSE CODE NUMBER	CREDIT HOURSE
فقہ القرآن و الحدیث	801	3
اسلام میں تحقیق کے اصول و مبادی	802	3
کسی ایک مضمون کا انتخاب کریں۔ 1.مصادر علوم اسلامیہ 2.اسلام اور سیاسی نظریات	803 804	3

Total Credit Hours: 09

2nd SEMESTER

COURSE TITLE	COURSE CODE NUMBER	CREDIT HOURSE
اجتہاد اور عصری مسائل	805	3
اسلام اور استشراقی فکر	806	3
کسی ایک مضمون کا انتخاب کریں۔ 1.فقہ السیرة اور عصری تحدیات 2.اسلام اور تہذیب و تمدن	807 808	3

Total Credit Hours: 09

Facilities:

- **Departmental Library:**

The Library of the Department is managed by a qualified librarian. Though the library has a limited number of books, it fulfills the basic needs of the students. The department is trying to equip the library with all possible facilities.

- **Internet Facility:**

The internet facility is available in the office of Chairperson. It can be used at any time to get information and knowledge according to the requirements of the faculty members and students.

DEPARTMENT OF PSYCHOLOGY

Introduction

- Psychology belongs to that category of Social Sciences which are the sciences concerned with the people in the society. Psychology is an empirical study of human mind and behavior as such it touches every person. Knowledge of Psychology is therefore important in every human endeavor.
- Psychology not only focuses upon the issues like personality, attitude, learning, perception, Intelligence, Motivation, but also helps an individual in the adjustment of his/ her own environment. Psychologists positively help the society at large to resolve the social issues like violence, discrimination, terrorism, crimes, etc. It exercises an influence on the understanding and progression of other social sciences like Economics, Business, Human Resource, Administration and Social Work.
- The Department of Psychology was established in 1989 with introduction of various teaching programs, Masters in Psychology, started in 1990, however, M.Phil in Psychology got initiated in 2013.

Objectives

- To educate and train batches of motivated psychology graduates who will be instrumental to carry out studies, practices and interventions for mitigating the social sufferings, social and natural traumas and addressing the complex behaviors that render violence, exclusion and discrimination.
- To create cadres of proactive and practical human resource that will contribute and lead processes of institutional building, psychosocial services, various public and private organizations in Mental Health Related issues.

Job/Career Opportunities

- Education and Research Institutes
- Hospitals / Clinical Settings
- Armed Forces
- Public / Private Industrial Sector
- LNGOs / INGOs

Faculty Members

S.#	Name	Designation	Qualification
1	Dr. Saima Ambreen	Chairperson/ Assistant Professor	Ph.D. (Psychological Testing) – Quaid-E-Azam University, Islamabad, Pakistan.
2	Prof. Dr Muhammad Azam Tahir	Professor	Ph.D. (Forensic Psychology) – Aristotle University Thessaloniki, Greece.
3	Mr. Aziz Uddin Agha	Assistant Professor	M.Phil. (Clinical Psychology) – University of Balochistan, Quetta, Pakistan.

4	Mrs. Mehreen Siddique	Lecturer (on study leave)	M.Phil. (Clinical Psychology) – University of Balochistan, Quetta, Pakistan.
5	Mrs. Sara Durrani	Lecturer	M.S. (Clinical Psychology) – Govt. College University, Lahore, Pakistan.
6	Mrs. Samreena Rose	Lecturer	M.Phil. (Social Psychology) – University of Balochistan, Quetta, Pakistan.

Programs

- M.Phil in Psychology by approved criteria of HEC (courses detail available on UOB website).
- PhD in Psychology by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil

Semester I

Course Code	Course Title	Core/Optional Course	Credit Hours
PSY-701	Research Methods in Psychology	Core	3 (3-0)
PSY-703	Seminars in Theories of Psychology	Core	3 (3-0)
PSY-704	Measurement and Assessment in Psychology	Core	3 (3-0)
PSY-706	Clinical Psychology	Optional*	3 (3-0)
PSY-709	Educational and Career Psychology	Optional*	3 (3-0)

PSY-713	Adolescents Behavioral Problems	Optional*	3 (3-0)
Total Credit Hours			12 credit hours

*Only one of the three optional courses will be offered in the 1st semester.

Semester II

Course Code	Course Title	Core/Optional Course	Credit Hours
PSY-702	Applied Statistics	Core	3 (3-0)
PSY-705	Counseling Psychology	Core	3 (3-0)
PSY-707	Advances in Social Psychology	Optional**	3 (3-0)
PSY-708	Industrial and Organizational - IO Psychology	Optional**	3 (3-0)
PSY-710	Community Psychology	Optional**	3 (3-0)
PSY-711	School Psychology	Optional**	3 (3-0)
PSY-712	Psychology of Gender	Optional**	3 (3-0)
Total Credit Hours			12 Credit Hours

Semester III and/or Semester IV

Duration of M.Phil. is 18/24 months and after completion of one year course work (two semesters) scholars have to complete a research project/ research thesis in the next semester(s).

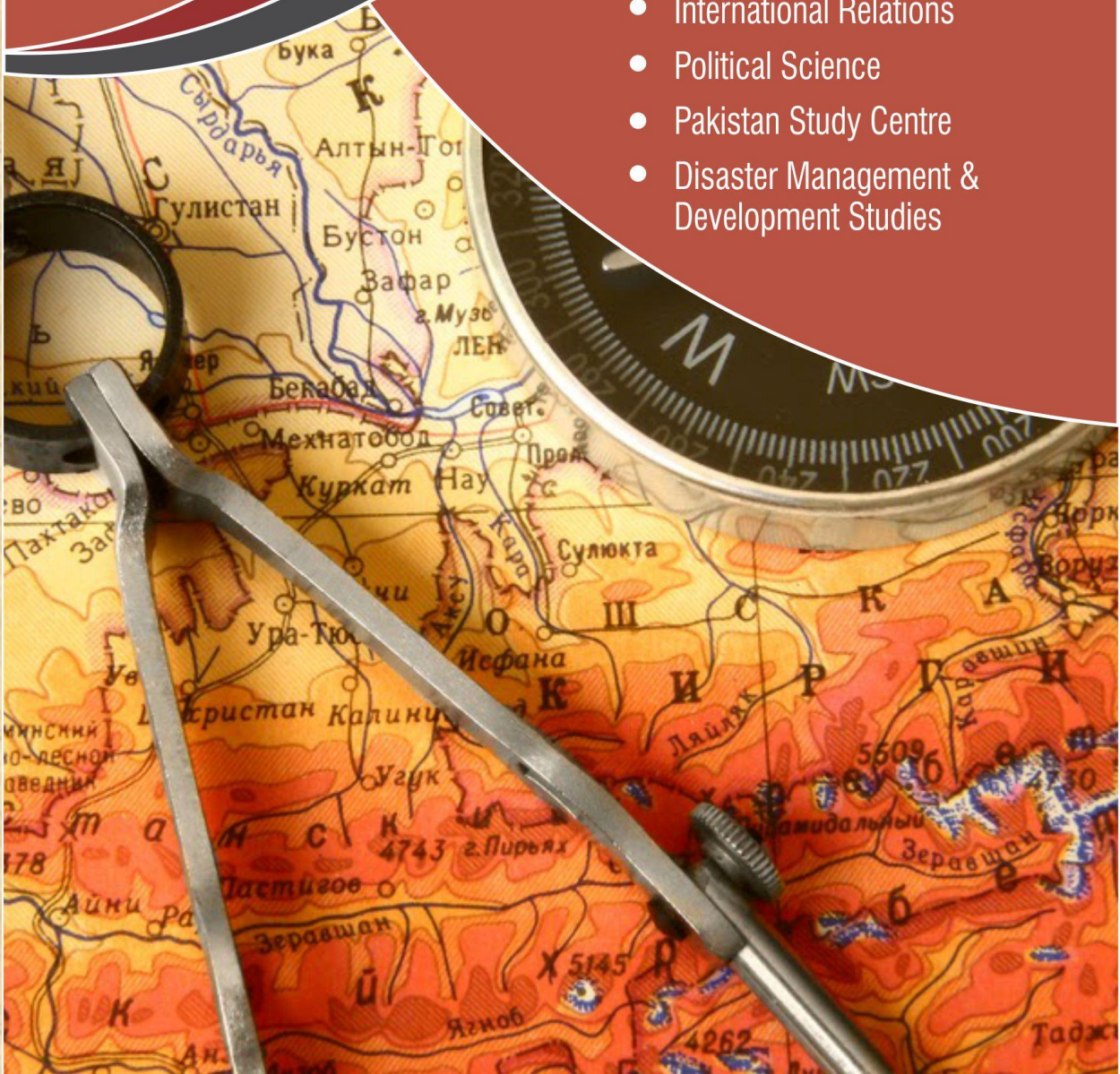
Facilities

- **Experimental Laboratory.** The Department of Psychology has a laboratory, equipped with required stuff and relevant staff.
- **Departmental Library.** The Departmental Library has over 600 books which cover wide range of themes in psychology for teaching and research purpose. The library is managed by a qualified and professional librarian.



Faculty of Social Sciences

- Balochistan Study Centre
- International Relations
- Political Science
- Pakistan Study Centre
- Disaster Management & Development Studies





BALUCHISTAN STUDY CENTRE

Introduction

- University of Balochistan has gradually evolved systems and institutional bases for creating high quality of human resource at various levels. In order to cater the emerging educational, social and economic challenges at state and society level, UOB harnessed her resources to establish Balochistan Study Center. The rationale behind materializing this center was to specialize the academic and research endeavors that can transcend the existing scholastic portfolios and approaches of research and human resource development. The need of creating informed knowledge base and specific research interventions on the history, geography, ethnography, culture, literature, and archeology of Balochistan was felt at various levels.
- The concept of Balochistan Study center was tested in 1997 and it was formally launched and inaugurated in October 1998.

Objective:

- To provide professional, technical and conceptual support to the young and emerging researchers and academicians for carrying out innovative research projects in the domain of history, archeology, anthropology, culture, economy, languages, literature, politics and social structure of province Balochistan, so that to foster updated knowledge base and high quality human resource in the province.

Employment Opportunities/

- Academic and research courses likely enable individuals to seek employments in the public and private institutions working on the culture, language, archeology, literature, and history.
- Courses enable students to carry out short term research projects and provide advisory and consultancy services to INGOs, NGOs, Corporate sector and public sector

Faculty Members:

S.#	Name	Designation	Qualification
1.	Prof. Dr. Abdul Haleem Sadique	Professor/ Director	Ph.D
2.	Mr. Ghulam Farooq	Assistant Professor	Ph.D
3.	Mr. Ghulam Nabi Sajid	Assistant Professor	Ph.D

Program

- M.Phil in Brahui, Balochi, Sociology, Social Work by approved criteria of HEC (courses detail available on UOB website).
- PhD by Brahui, Balochi, Sociology, Social Work approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil

Sociology

1st semester

S#	Course Code	Course Title	Credit hours
1.	Bs.702 Soc	Balochistan studies (Language and literature)	03
2.	Bs.701 Soc	Research Methodology	03
3.	Bs.725	Principle of Sociology	03
4.	Bs.726	Social Problem	03

2nd Semester

S#	Course Code	Course Title	Credit hours
1.	Bs.704	Balochistan studies (History Of Balochistan)	03
2.	Bs.703	Proposal Development	03
3.	Bs.727	Sociological Theory	03
4.	Bs.508 728	Social Institution	03

M.Phil

Social work

1st semester

S#	Course Code	Course Title	Credit hours
1.	Bs.702	Balochistan studies (Language and literature)	03
2.	Bs.701	Research Methodology	03
3.	Bs.735	Contemporary Social work	03
4.	Bs.736	Human Resource	03

2nd semester

S#	Course Code	Course Title	Credit hours
1.	Bs.704	Balochistan studies (History Of Balochistan)	03
2.	Bs.703	Proposal Development	03
3.	Bs.737	Social Problems Of Pakistan	03
4.	Bs.738	Method of Social work	03

**Ph.D:
Sociology****1st semester**

S#	Course Code	Course Title	Credit hours
1.	Bs.802	Advance Research Methodology	03
2.	Bs.801	Balochistan Studies (Langugages and culture)	03
3.	Bs.803	Sociology of development	03

2nd semester

S#	Course Code	Course Title	Credit hours
1.	Bs.804	Contemporary Social problems of Balochistan	03
2.	Bs.805	Research writing	03
3.	Bs.806	Contemporary Perspective in Sociological Theory	03

**Ph.D:
Balochi****1st Semester**

S#	Course Code	Course Title	Credit hours
1.	Bs.801	Advance Research Methodology	03
2.	Bs.802	Balochistan Studies (Langugages and culture)	03
3.	Bs.811	Balochi Zaban o Saqafat	03
4.	Bs.812	Balochi Zaban o Adab ki Tareekh	03

2nd semester

S#	Course Code	Course Title	Credit hours
1.	Bs.813	Balochi lok,aur Qadeem (classical)shaheri	03
2.	Bs.814	Muntkhib Nasari Asnaaf ka Mutalya	03
3.	Bs.815	Balochi Tanqeed ki Rawaayati Mutalaya	03
4.	Bs.738	Balochi Jadeed Shaheri	03

Facilities

Library: The Centre has its exclusive library, containing above three thousands books, periodicals, magazines and monographs. Reference section of the library particularly facilitates research scholars in finding relevant stuff on their themes.

Research Journal: The Centre is continuously publishing a Bi-annual research journal since 1998. The journal (Balochistan Review ISSN: 1810-2174) approved by Higher Education Commission (HEC) unfolds opportunities to publish the research work of the indigenous, national and international research scholars.

Seminar Hall: The Centre has its Seminar Hall which is instrumental to facilitate the scholars from different backgrounds and working with Balochistan Study Centre and other departments of the University of Balochistan. Seminars pertaining to the research work of the scholars and other issues are organized at the center that harnesses the potential to scholars to improve their presentation and communication skills and triangulate their respective learning earned through the course of time. The hall has been hosting national and international seminars, conferences, workshops, debates and training programs.

Museum. Containing almost more than 1000 first-hand archaeological objects excavated and collected from different sites, the museum of Balochistan Study Centre is one of the richest museums of the Province. The sites excavated for this purpose include Mehr garh, Zhob, Quetta, Naal, Mashkey, Turbat, Kalat, Surab, Kharan, Khuzdar, Bela and Kachhi plains of Balochistan. The centre tends to facilitate preservation and protection of sites explored henceforth.

Photo Gallery: The center has a Photo Gallery depicting the historical prospects of diverse cultures, ethnographies and natural landscapes of the province.

DEPARTMENT OF INTERNATIONAL RELATIONS

Introduction

- In the wake of overwhelming changes at the premise of global politics that shapes relations amongst nations and societies in the world. With the advancement in technology distance has been shrinking and world has gradually become global village. Geo-politics of the medieval ages which was arranged at military balance of power has now emerged as geo-economics influencing the socio-economic as well as political environment of every country. Business and industry has crossed the traditional borders of nation states and multinational corporations are now challenging the sovereignty of states. The power potential of nation is no more restricted to boundaries; it gets directly influence to regional and super powers. Mainly these relations have given birth to the discipline of International Relations. No country in the contemporary time can afford to ignore it. The study of International Relations therefore has assumed a remarkable significance. The International Relations has been evolved as a discipline to respond and articulate the complexities, challenges and opportunities folded in international relations. University of Balochistan launched the Department of International Relations in 1984. With inception the department initiated two years master level (M.A) program in International Relations.

Objectives;

- To create and develop high quality of professionals human resource that can directly and indirectly contribute to the national and regional level educational institutions & research organizations for shifting the course of International Relations in the favor of the country and region.
- To launch educational programs and foster a bolstering environment of learning, analysis and articulation that can encourage students to transcend their experiences beyond symptomatic levels and can tangibly translate their ideas into concert actions.

Job/ Career Opportunities

- Provincial and Federal Public Services.
- Education/ research institutes at public and private sector.
- Print and Electronic Media.
- Civil society and rights based organizations
- International Networks on the promotion of peace and pluralism

Faculty Members

S.#	Name	Designation	Qualification
1	Prof. Dr. Abdul Manan Bazai	Professor/ Chairperson	Ph.D
2	Dr. Mir Wais Kasi	Assistant Professor	Ph.D
3	Dr.Zafar Khan	Lecturer	Ph.D
4	Mr. Abdul Qadir	Lecturer	M.Phil

Program

- M.Phil in International Relations by approved criteria of HEC (courses detail available on UOB website).
- PhD in International Relations by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M. Phil Course Work

First Semester

Compulsory Courses

course Code	Course Title	Credit Hours
IR-701	Advance Research Methodology	03
IR-702	Pakistan's Foreign Relations	03

Optional Courses

Course code	Course Title	Credits Hour
IR-703	Nature of International Organizations	03
IR-704	World Politics Since 1945	03

Second Semester

Compulsory Courses

Course Code	Course Title	Credits Hour
IR-705	Basic factors in International Relations	03
IR-706	Diplomatic History of International Relations	03

Optional Courses

Course Code	Course Title	Credits Hour
IR-707	Politics of International Economic Relations	03
IR-708	Contemporary Strategy	03

Third & Forth Semester:

Thesis Writing:

The candidate will have to submit Assignments as assigned by his/her supervisor in the registrar's office during the 3rd and 4th Semester

Ph. D Course Work

First Semester

Course Code	Course Title	Credits Hour
IR-801	Research Methods in I.R	03
IR-802	Pakistan's Foreign Policy	03
IR-803	Theories and Principles of I.R	03

Second Semester

Course Code	Course Title	Credits Hour
IR-804	Global Politics Since World War I	03
IR-805	Modern International Law	03
IR-806	European History 1789-1914	03

For the following four semesters the Scholar have to submit Research Thesis, and defend it, as prescribed by HEC under, guidelines of GSO, UoB.

DEPARTMENT OF POLITICAL SCIENCE

Introduction

- Political Science is a Social Science discipline concerned with the study of the state, government and politics. It deals extensively with the theory and practice of politics, and the analysis of political systems and political behavior. Political scientists tend to engage in revealing the relationships underlying political events and conditions. It fosters these revelations to construct general principles about the way the machine of politics works. Political scientists study matters concerning the allocation and transfer of power in decision-making, the roles and systems of governance including governments and international organizations, political atmosphere and public policies. They measure the success of governance and specific policies by examining many factors, including stability, justice, material wealth and peace.
- University of Balochistan launched its Department of Political Science in 1974 under the auspices of Dr. S. Riaz Ahmed. Since inception, the department has been offering M.A. programs. In wake of time the department has also started M.Phil and Ph.D level programs that have gained utmost response from scholars across the province Political Science study programs stands among the highly productive disciplines of the University. Admissions are based on competition and merit.

Objectives

- To bolster an educational and research environment that can figure out highly creative, analytical and qualified professionals in the subject of Political Science so that the emerging challenges at global, regional and national level could be transformed into opportunities while feeding back to the educational institutes, civil society organizations, political parties, local and national level governance structures.
- Providing students with opportunity pursue knowledge, involvement in a discourse about politics, moral evaluation of political concept and the resolution of practical, political problems through combining practical knowledge about politics with insights into the timeless questions of political life, individual and his place in society.

Job/Opportunities

- Political Analyst
- Federal / Provincial Civil Service
- Journalism
- International Organization
- Public Relation Officer
- Management Positions
- Education / Research Organization
- Self-employment

Faculty Members

S.#	Name	Designation	Qualification
1	Prof. Dr. Naheed Anjum Chishti	Professor/ Dean, Faculty of Social Sciences	Ph.D Gold Medalist
2	Dr. Abdul Qadir	Assistant Professor/ Chairperson	Ph.D
3	Dr. Adil Zaman Kasi	Assistant Professor	Ph.D
4	Mr. Abdul Manan Kakar	Assistant Professor	M.Phil
5	Mr. Mumtaz Ali Baloch	Assistant Professor	M.Phil
6	Ms. Hussan Ara Magsi	Assistant Professor	M.Phil

Program

- M.Phil in Gender Studies by approved criteria of HEC (courses detail available on UOB website).
- PhD in Gender Studies by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A. /F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil

1st semester

Code	Course Title	Course	Credit
POLSC 701	Social Research Methods	Core	3
POLSC 702	Classical Political Theory	Core	3
POLSC 709	Political Parties in Pakistan	Elective	3
POLSC 713	International Law	Elective	3
Total			12

2nd Semester

Code	Course Title	Course	Credit
POLSC	International Political Economy	Core	3
POLSC	Comparative Politics	Core	3
POLSC	Elective 1	Elective	3
POLSC	Elective 2	Elective	3
Total			12

Third & Forth Semester:
Thesis Writing

PH.D

1st Semester

Political Science			
Code	Course Title	Course	Credit
POLSC 801	Advance Research Methods	Core	3
POLSC 803	Public Policy and Analysis	Core	3
POLSC 812	Public International Law	Elective	3
Total			9

2nd Semester

Code	Course Title	Course	Credit
POLSC	Contemporary Political Theory	Core	3
POLSC	Advance Comparative Politics	Core	3
POLSC	Elective	Elective	3
Total			9

SEMESTER 3, 4,5 & 6	
Thesis	24

PAKISTAN STUDY CENTER

Introduction

- Pakistan Study Centre, University of Balochistan, Quetta initially started its functioning since 1974. It was 1976 when the Centre was formally established under Pakistan Study Centre, Act No. XXVII of 1976 by the Government of Pakistan in the premises of the University of Balochistan, for the study of languages, literature social structure customs, attitudes and to motivate the people of various region of Pakistan towards Nation building. At present it is functioning as an active academic unit of the University of Balochistan. It is producing MA, M.Phil and Ph.D. in Pakistan studies. The faculty members from the University and from the constituent colleges take admission in M.Phil and Ph.D courses.

Objectives

- To Promote the National solidarity, Integration and the unity in accordance with the Ideology of Pakistan among the people of different regions to study
- The languages, literature, culture, customs and history of the different regions of the country.
- High level of teaching and research activities.
- To establish M.A, M.Phil, Ph.D in Pakistan Studies.
- To arrange Conferences, Seminars, Symposium and workshops for the development of teaching and research.
- To promote teaching and research in particular subjects as assigned to it by the Federal Government in consultation with the University in which the Centre is established.
- It is an immense pleasure for me to inform that the Academic Council of the University of Balochistan in its meeting held on 26th-27th Dec. 2013, approved the establishment of the two chairs. 1. Khan Abdul Samad Khan Achazai Shaheed & 2. Nawab Yousuf Aziz Mugsi, for their outstanding social, political and intellectual status at provincial and national level. The Academic Council approved the establishment of these chairs to pay tribute to the legends of the nation.

Vocation Job Opportunities / Marketability of Graduates.

The students who will qualify in Pakistan Studies can find job opportunities in the following departments/ organizations.

- Teaching.
- Competitive Exams.
- Public Relation Officer.
- Pakistan Tourism Department.
- Inter Organizational Coordinator.
- International Organizations as Representatives of Pakistan.
- Organizational Development in Pakistan.

Faculty Members

S.#	Name	Designation	Qualification
1.	Dr. Muhammad Usman Tobawal	Director	Ph.D
2.	Mr. Noor Ahmed	Assistant Professor	Ph.D
3.	Mr. Yousaf Ali Rodeni	Assistant Professor	M.Phil
4.	Ms. Surya Bano	Assistant Professor	M.Phil
5.	Ms. Shazia Jaffar	Lecturer	M.Phil
6.	Mr. Nazir Ahmed Kasi	Lecturer	M.Phil
7.	Mr. Bijar Khan	Lecturer/R.O	M.Phil
8.	Mr. Pervaiz Ahmed	Lecturer/R.O	M.Phil

Program of Studies

- Pakistan study center provides 3 different program of studies leading to M.A., M.Phil and Ph.D. degrees.
- A student seeking admission in M.Phil/Ph.D. has to complete the requisite number of credit hour for course work as laid down in Higher Education Commission regulations for the said degrees.
- A Research dissertation based on original Research work will also be submitted. The minimum duration for M.Phil is two years and for Ph.D. three years.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A./F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil:

COURSE CODE	COURSE TITLE FOR M.PHIL (Pakistan Studies)
	<u>First Semester</u>
PS-701	Research Methodology
PS-702	Philosophy and political thought of Allama Iqbal & Quaid-e-Azam
PS-703	Geography of Pakistan
PS-704	Political System of Pakistan
	One (1) Article to be published in HEC recognized Journal
	<u>Second Semester</u>
PS. 705	Society & Culture in Pakistan
PS. 706	Philosophical & Political Studies of Khan Abdul Samad Khan Achakzai Shaheed & Nawab Mir Yousuf Aziz Magsi.
PS. 707	Economy of Pakistan
PS. 708	Media in Pakistan
	One (1) Article to be published in HEC recognized Journal
	<u>Third Semester</u>
PS. 709	Synopsis Writing
PS. 710	Data Collection.
PS. 711	Data Analysis
	<u>Fourth Semester</u>
PS. 712	Publications or paper writing
PS. 713	Thesis writing
PS. 714	Presentation / Viva Voce

COURSE CODE	COURSE TITLE FOR M.PHIL (Education)
	<u>First Semester</u>
PS-601	Research Methodology
PS(ed)-103	Advance Educational Psychology
PS(ed)-104	Foundation of Education
	One (1) Article to be published in HEC recognized Journal
	<u>Second Semester</u>
PS(ed)-201	Sociology of Education
PS(ed)-204	Teaching Style & Strategies
PS. 607	Social Problem of Pakistan
PS. 608	Social Institution & Society
	One (1) Article to be published in HEC recognized Journal
	<u>Third Semester</u>
PS. 709	Synopsis Writing
PS. 710	Data Collection.
PS. 711	Data Analysis

	Fourth Semester
PS. 712	Publications or paper writing
PS. 713	Thesis writing
PS. 714	Presentation / Viva Voce

Ph.D

COURSE CODE	COURSE TITLE FOR Ph.D.
	First Semester (Pakistan Studies)
PS-801	Advance Research Methodology (Compulsory course)
PS-802	Socio, Economic & Political System of Pakistan (Compulsory course)
PS-803	Theories & Principles of International Relations (Optional course)
PS-804	The Basic Concept of Sociology (Optional course)
PS-805	Community Organization (optional course)
PS-806	Contemporary Mass Media in Pakistan (optional course)
	Second Semester
PS-807	Development of Major Languages in Balochistan (Compulsory course)
PS-808	Modern International Law (optional course)
PS-809	World Affairs since 1945 (optional course)
PS-810	Sociology of Society and Social Institution (optional course)
PS-811	Criminology (optional course)
PS-812	Social Case Work (optional course)
PS-813	Social policy, Welfare planning and Administration (optional course)
PS-814	Literary Journalism in Balochistan (optional course)
PS-815	Government press Relations and Constitution Development in Pakistan (Opt)

COURSE CODE	COURSE TITLE FOR Ph.D.
	First Semester (Social Work)
PS(sw)-503	Social Case Work Method
PS(sw)-504	Social Group Work
	Second Semester
PS(sw)-607	Development of Major Language in Balochistan
PS(sw)-502	Social Case Work Method
PS(sw)-503	Social Policy Welfare Planning & Administration

Facilities

- Following facilities are available in Pakistan Study Center.
- Library (Books 2200)
- Class Room for MA classes
- Class Room for M.Phil. & Ph.D. students.
- Computer facility
- Telephone Facility
- Internet Facility
- Intercom to all the faculty members
- Common room for girl's students.

DEPARTMENT OF DISASTER MANAGEMENT AND DEVELOPMENT STUDIES

Background

- Baluchistan is relatively the least developed province of Pakistan. Several studies/reports have found Baluchistan to have the lowest levels of human development in the country. The province lags behind the rest of the country in economic growth, labor productivity, health, education and other socioeconomic indicators. Its poverty level is higher than the national average and there is significant difference between rural and urban poverty incidence in the province. The province also suffers from the widest gender gaps in education and health in the country. Poor social indicators depict the state of human resource development in the province.
- In addition to the poor social and economic indicators, Baluchistan is also exposed to a number of natural hazards. Due to fast rate of population growth, urbanization, poverty, climate change and geographical location, most of the regions of Pakistan including Baluchistan have become highly susceptible to natural disasters such as flood, cyclone, drought, earthquake, landslide, extreme temperature, heavy rain, epidemics, etc. In the recent past, these hazards have resulted in some major disasters, such as Ziarat earthquake of 2008, Awaran earthquake of 2013 and the flood of 2010. Drought from 1998- 2004 worsened the situation and the rural economy has still not fully recovered from the effects.
- It has been felt that there is limited capacity at national and particularly at provincial level in terms of knowledge base, skills training, Long-term planning, emergency preparedness and policy development to respond to such severe disaster events.
- The lack of expertise in the fields of disaster management and development planning, have further exacerbated the people's vulnerability to different disasters and worsen the development situation of the province. The weakest social and economic development indicators are attributed to the lack of human resource, professional expertise and research institutions in proportion to the development potential and needs of the province. These facts provide a strong rationale to initiate an academic program for building and strengthening experts in the field of development studies and disaster management to contribute in the development process of the province and to develop innovative ways of building the resilience of communities to disasters.

Introduction

- The department of Disaster Management and Development Studies is a newly established department at Baluchistan university and is distinguished by its mission to develop highly qualified and committed professionals who can play a leading role in the sustainable development of not only Baluchistan province but also at the national, regional, and global level. The department is especially unique in that it will serve the human resource development needs taking into accounts the specific development priorities, vulnerabilities to natural disasters, gender issues and social values of the province and country. Interdisciplinary and problem oriented education/training at DMDS equips the students with both academic and professional skills needed for a career in the development sector.

Goals

The aims behind the new discipline are as under:

- Major goal is institutional capacity development in the Baluchistan with focus on working with decision makers, national and international organizations.
- The philosophy of DMDS is the need to provide broad core disaster risk management and development education with focus on Rural Development.
- The DMDS will bridges the gap between theory and practice.
- To enhance students' knowledge base, concrete decision-making and critical problem-solving skills.

Objectives

- To reinforce local, regional and national disaster reduction efforts through mainstreaming development studies experts.
- Provide postgraduate Diploma, Master and PhD Programs on Disaster Risk Management and Development Studies.
- To mitigate disasters and enhance rural development through planning.
- To produce market oriented students related to DM and DS.
- To Work with PDMA and other government sectors to develop research and training for the broad spectrum of development and disasters.

Faculty Members

Sno	Name	Designation	Qualification
1	Dr. Syed Ainuddin	Associate Professor/ Chairperson	PhD (Thailand)
2	Dr. Mohammad Ashraf	Assistant Professor	PhD (Thailand)
3	Dr. Ghulam Murtaza	Assistant Professor	PhD (Thailand)

Objectives

- To reinforce local, regional and national disaster reduction efforts through mainstreaming development studies experts.
- Provide postgraduate Diploma, Master and PhD Programs on Disaster Risk Management and Development Studies.
- To mitigate disasters and enhance rural development through planning.
- To produce market oriented students related to DM and DS.
- To Work with PDMA and other government sectors to develop research and training for the broad spectrum of development and disasters.

Doctoral Degree Program

- Degree Title: The doctoral degree offered by DMDS is the Doctor of Philosophy in Disaster Management and Development Studies

Entry Requirements:

- MS/M.Phil with 18 years of education in relevant field.

Degree Requirements:

- To qualify for the degree of Doctor, a student must satisfactorily complete the minimum 18 credits coursework requirement. Moreover, he/she has to maintain a cumulative grade point average of not less than 3.50, has to complete a Doctoral dissertation and defend it at an oral examination, has to obtain a satisfactory evaluation of the dissertation from the External Examiner. Most importantly, he/she has to publish at least one scientific paper based on his/her dissertation in an international refereed journal where the student is the first author before the final examination. Before a student can be advanced to candidacy for the degree of Doctor, he/she must satisfactorily complete the coursework and CGPA requirements; and have passed a qualifying examination, conducted by his/her Program Committee in public seminar followed by a defense of his/her dissertation proposal in an oral examination.

Training and Capacity Building

- Drawing on its body of knowledge and expertise, the department of Disaster Management and Development Studies offers non-degree training programs and continuing education courses for practicing professionals from across the Country.

Career for Graduates

- Interdisciplinary and problem oriented training at DMDS equips the graduates with both academic and professional skills needed for a career in the development sector. Job opportunities for graduates cover many areas of regional and national and government and non-governmental organizations, community participation, regional planning and project planning, implementation, monitoring and evaluation of development programs at international, national and local levels. Opportunities for graduates may also arise in the emergency services, emergency planning and response services, government agencies, local authorities, relief agencies, United Nations organizations, uniformed services, non-governmental organizations etc.

Establishment of Remote Sensing/Geographic Information System Laboratory

- The RS/GIS Laboratory needs to be established with at least 30 Networked computer systems specially configured to support the specialized software required for remote sensing applications, and for storing the large images acquired by remote sensing instruments. The laboratory will provide an environment where faculty and students work together to advance knowledge in the application of geospatial technologies in ecosystem science and natural resource management. The RS/GIS laboratory will enable the students and faculty to conduct scientific research focusing on agricultural efficiency, carbon management, ecological forecasting, invasive species and water management, make digital geospatial data readily available to a variety of constituents through web-enabled distribution tools.

M.Phil

Semester/Term	No. of Subjects	Credit Hours	Total Credit Hours
1st	4	3	12
2 nd	4	3	12
3rd +4 th	Thesis		6
Total Credit Hours			30

Core Courses for M-Phil in DMDS

Course Id	Course Name	Credit
DMS 501	Disaster Planning and Mitigation	3
DMS 502	Development Planning Techniques	3
DMS 503	Hazards and Vulnerability Resilience Assessment	3
DMS 504	District Development Planning	3
Total		12

Optional Courses for M.Phil in DMDS (12 Credits)

Course Id	Course Name	Credit
DMS 505	Advanced Research Methodology	3
DMS 506	Community Based Disaster Risk Reduction	3
DMS 507	Gender and Development	3
DMS 508	Applied Statistics Using SPSS	3
DMS 509	Biodiversity and Conservation	3
DMS 510	Human Resource Management	3
DMS 511	Disaster and Psychological Management	3
DMS 512	Environmental Hazards	3
DMS 513	Organizational Conflict Management	3

SEMESTER BREAKUP SPRING SEMESTER

Course Id	Course Name	Credit
DMS 501	Disaster Planning and Mitigation	3
DMS 502	Development Planning Techniques	3
DMS 505	Advanced Research Methodology	3
DMS 509	Biodiversity and Conservation	3
Total		12

FALL SEMESTER

Course Id	Course Name	Credit
DMS 503	Hazards and Vulnerability Resilience Assessment	3
DMS 504	District Development Planning	3
DMS 508	Applied Statistics Using SPSS	3
DMS 510	Human Resource Management	3
Total		12

CORE COURSES FOR PhD in DMDS

Course Id	Course Name	Credit
DMS 601	Disaster Risk Reduction in Pakistan	3
DMS 602	Disaster and Development	3
DMS 603	Project Design, Monitoring & Evaluation	3
DMS 604	Community and Rural Development	3
Total		12

OPTIONAL COURSES FOR PhD in DMDS

Course Id	Course Name	Credit
DMS 605	Community Based Disaster Risk Reduction	3
DMS 606	Advanced Research Methodology	3
DMS 607	Health and Development	3
DMS 608	Applied Statistics Using SPSS	3
DMS 609	Biodiversity and Conservation	3
DMS 610	Paleo-Climatology	3
DMS 611	Natural Resource Economics	3
DMS 612	Seismotectonics	3
DMS 613	Impact of Climate Change on Regional Biota	3

SEMESTER BREAKUP**SPRING SEMESTER**

Course Id	Course Name	Credit
DMS 601	Disaster Risk Reduction in Pakistan	3
DMS 603	Project Design, Monitoring & Evaluation	3
DMS 606	Advanced Research Methodology	3
Total		9

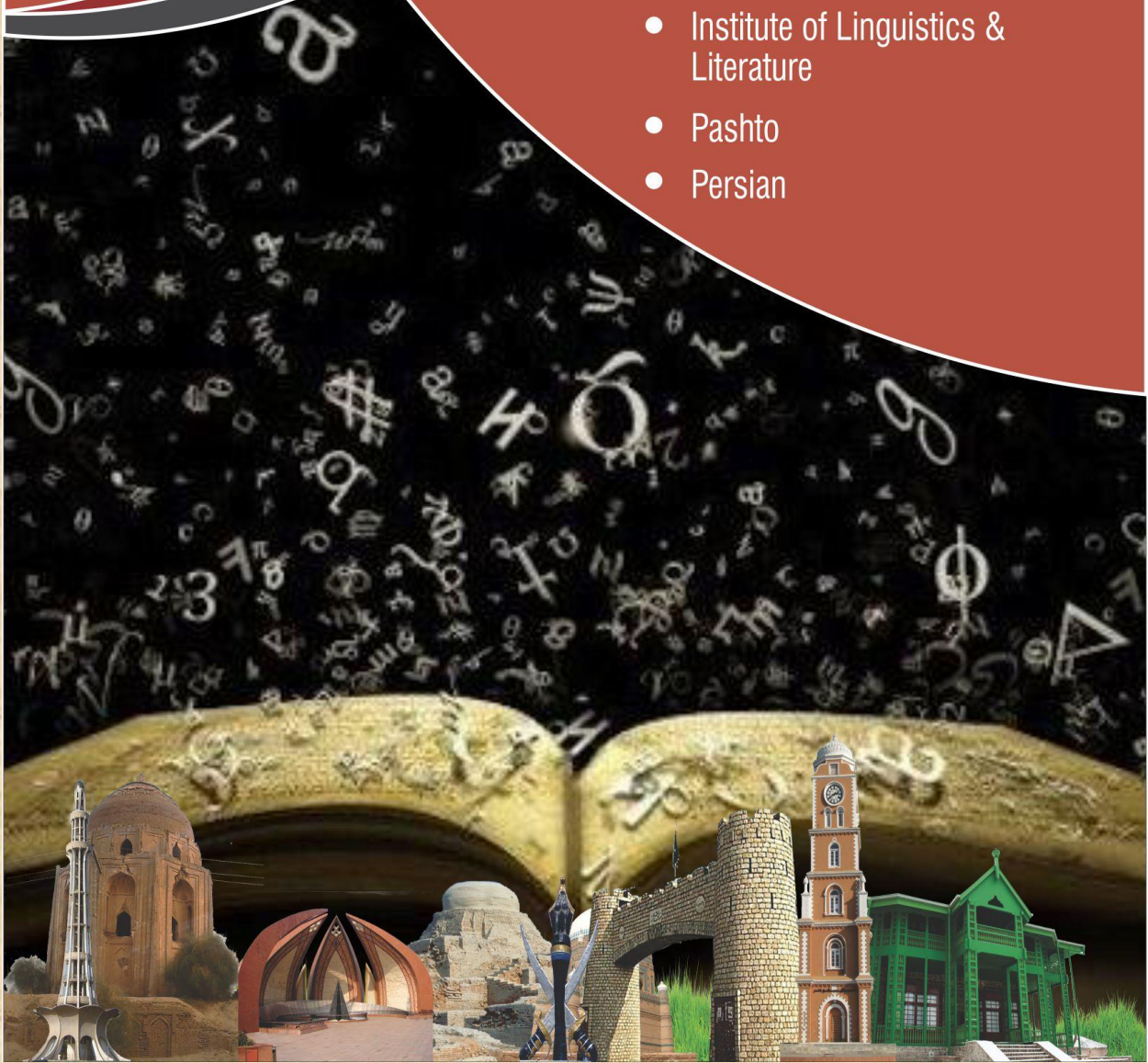
FALL SEMESTER

Course Id	Course Name	Credit
DMS 602	Disaster and Development	3
DMS 604	Community and Rural Development	3
DMS 608	Applied Statistics Using SPSS	3
Total		9



Faculty of Literature & Languages

- Balochi
- Brahui
- Institute of Linguistics & Literature
- Pashto
- Persian





DEPARTMENT OF BALOCHI

Introduction:

- The Balochi is one of the Endo-Iranian stocks of languages that is estimated to be over six thousand years old. In the nutshell, Balochi belongs to the Northwestern group of the Iranian languages, which means that it shares certain sound characteristics with Kurdish, Parthian and New Persian.
- The Department of Balochi was gradually evolved, courses of Baloch Adeb, Fazal and Alim were started in 1978, these courses were upgraded to masters in 1985 and in 1992 the department of Balochi was established. Mir Aqil Khan Mengal was the first chairperson.
- Since inception, the department has been contributing in developing cadres of Balochi languages, literature and culture experts that are serving in the different national and provincial level institutions. The department publishes a bi-annual bilingual research journal recognized by HEC in the Z-category.

Objectives

- To develop viable learning environment in the department for creating qualified human resource while understanding, learning, and experiencing the Balochi language, and literature as a discipline.
- To develop innovative academic and research portfolios that many diversify and expand the knowledge base regarding the language, literature, culture, history and art forms of the traditional and modern Baloch, Balochi and Baluchistan.

Job/Career Opportunities

- Education/ Research.
- Electronic and Print Media.
- Interpreter/ Translator in Public/ Private Sectors.
- Archeology and history in lok versa.
- Cultural and Literary institutes.

Faculty Members

S.#	Name	Designation	Qualification
1.	Mr. Hamid Ali Baloch	Assistant Professor/ Chairperson	M.Phil
2.	Dr. Zeenat Sana Baloch	Professor	Ph.D
3.	Ms. Nasreen Gul	Assistant Professor	M.Phil
4.	Mr. Rahim Bakhsh	Assistant Professor	M.Phil
5.	Mr. Abdul Razzaq Dad	Lecturer	M.Phil

Programs

- M.Phil in Balochi by approved criteria of HEC (courses detail available on UOB website).
- PhD in Balochi by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil is one and half years and for PhD, it is Three year.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A./F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil

1st semester

پہلا سمسٹر (لازمی) Compulsary

نمبر شمار	کورس ورک (پرچہ)	کورس کوڈ نمبر	کریڈٹ آورز
1	اصول تحقیق	Bal 401	3
2	تاریخ بلوچی زبان	Bal 402	3
3	تاریخ بلوچستان قدیم دور	Bal 403	3

2nd Semester

پہلا سمسٹر (اختیاری)

نمبر شمار	کورس ورک (پرچہ)	کورس کوڈ نمبر	کریڈٹ آورز
4	بلوچی ثقافت کے خدو خال	Bal 404	3
5	بلوچ عشقیہ داستان: تاریخ و روایت	Bal 405	3
6	توقلی مست: فن و شخصیت	Bal 406	3
		ٹوٹل کریڈٹ آورز	12

Facilities

- Mir Aqil Khan Mengal Memorial Library.
- Books & Research Journals 3000.
- Computer Lab.

DEPARTMENT OF BRAHUI

Introduction

- The Brahui is one of Dravidian languages that is known as the indigenous language of South Asia before the Aryan Invasions on India around 1500-1000 BC. The language and culture of Brahui people living in the central Balochistan and adjacent districts of Afghanistan has enriched and diversified through the course of history. Although studied by orientalist of the late 19th and early 20th century, the language, literature and social value system of these people still remain outside the academic and research domains.
- Along with other major languages of province Balochistan, higher education diplomas and master degrees also started in Brahui in 1985 under Pakistan Study Center. Based on the teaching and research endeavors, the department of Brahui was established in 1992. The department has crossed various academic and research milestones, while evolving its M.Phil and Ph.D programs and initiating the first research journal “Alburz” the is sponsored and recognized by HEC in the Z-category.

Objectives

- To foster effective study programs and meaningful environment to the groups of motivated young learners and students who would be recognized as post-graduate professionals in Brahui literature, culture and Language, capable of functioning at local, national and international levels.
- To expand the knowledge base and work out in-depth analysis on the themes of Brahui language, literature, folklore, culture, social history and the values systems while reviving ancient Brahui folklore, poetry and literature through teaching and research endeavors through its different degree awarding programs.

Job/Career Opportunities

- Education/ research institutes in Public/ Private Institutions,
- Electronic and Print Media.
- Interpreter/Translator in Public offices.
- Archeology and History in lok-versa.
- Literary/Cultural institutions.

Faculty Members

S.No	Name	Designation	Qualification
1	Dr. Manzoor Ahmed Baloch	Lecturer/ Chairperson	Ph.D
2	Dr. Liaqat Ali Sani	Associate. Professor	Ph.D
3	Mr. Shabir Ahmed Shahwani	Assistant Professor	M.Phil
4	Dr.Abdul Haleem Sadiq	Assistant Professor	Ph.D
5	Mrs. Abida Baloch	Assistant Professor	M.Phil
6	Mr. Yousaf Mengal	Lecturer	M.Phil

Programs

- M.Phil in Brahui by approved criteria of HEC (courses detail available on UOB website).
- PhD in Brahui by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil is one and half years and for PhD, it is Three year.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A./F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS.
- Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

Semester 1st

Code No	Course Name	Credit Hours
Br-RS-01	Brahui Ti Path oPol na Rudon o Aimiyat	4(3-1)
Br-TC-01	Brahui Tawar Chahindar o Lakwarh	4(3-1)
Br-MA-01	Brahui Mansoor Adab	4(3-1)

Semester 2nd

Code No	Course Name	Credit Hours
Br-NA-02	Brahui Manzoom Adab	4(3-1)
Br-SS-02	Sarhal o Sala Soji Niwisht	4(3-1)
Br-MB-02	Brahui Mat o Badal Na Aimiyat	4(3-1)

3rd & 4th Semester

Thesis writing

PhD

Semester 1st

Code No	Course Name	Credit Hours
Br-PN-01	Pat oPoli Niwisht o Sarhal	3(3-0)
Br-AV-01	Adabi Wail Sawab o Esareek	3(3-0)
Br-MA-01	Brahui Mauzoohati Adab	3(3-0)

Semester 2nd

Code No	Course Name	Credit Hours
Br-NT-02	Brahui Nasri Takhleeq Rudom o Bina	3(3-0)
Br-AC-02	Adabi Chindari o Takhleeqi Kirhd	3(3-0)
Br-AR-02	Adabi o Raji Khawast	3(3-0)

3rd & 4th Semester

Thesis writing

Facilities

- **Seminar Library:** Department has well established seminar library consisting of above 1000 books, periodicals and journals covering different subjects.
- **Career Counseling:** Student counseling facility to explore the hidden potential of the students and guiding them towards their field of interests within the department.

INSTITUTE OF LINGUISTICS AND LITERATURE

Introduction

- Every year a large number of students apply for admission in the Department of English with the expectation to improve their English. In a world of ever greater interaction the importance of English language cannot be denied. English has turned into a universal language. Institute of Linguistics and Literature aims to fulfill the ever growing demand of English. The institute is motivated to develop human resource and evolve effective research and analysis environment.

Objectives

- To develop conducive learning environment and enable students to acquire knowledge and understanding of linguistics as discipline and also master English Language competence so that to practically culminate their knowledge in diverse walks of life.
- To design and conduct short courses in foreign languages and provide opportunity of higher education to the talented students from various backgrounds and enable them to find venues in the local, national and global markets.

Job/Career Opportunities

- Education/ research institutes in Public/ Private Institutions,
- Electronic and Print Media.
- Interpreter/Translator in Public offices.
- English coaching centers and institutions
- Literary/Cultural institutions.

Faculty Members

S#	Name	Designation	Qualification
1	Prof. Dr. Faria Saeed Khan	Professor/ Dean, Literature & Languages/ Director	Ph.D
2	Dr. Niaz Hussain Soomro	Lecturer	Ph.D
3	Dr. Najia Asrar Zadi	Associate Professor	Ph.D
4	Dr. Saima Manzoor	Assistant Professor	Ph.D
5	Mr. Zeeshan	Assistant Professor/ Chairperson Department of Linguistics	M.Phil
6	Dr. Naseem Achakzai	Professor	Ph.D
7	Mr. Saeed Ahmed Lehri	Lecturer	M.Phil
8	Mr. Naeem Nasir	Lecturer	M.Phil
9	Mr. Zahid Hussain Pathan	Assistant Professor/ Director English Language Center	M.Phil
10	Mr Imran Bhatti	Lecturer	M.Phil

Programs

- M.Phil in English Literature by approved criteria of HEC (courses detail available on UOB website).

- PhD in English Literature by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil is Two years and for PhD, it is Three year.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A./F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

SEMESTER BREAKUP

M.Phil

Year I, Semester - I		
Course Code	Course Title	Credit Hours
ENG-712	Applied Linguistics	3 (3-0)
ENG-721	Research Methodology – I	3 (3-0)
ENG-714	Studies on Hardy	3 (3-0)
ENG-718	Pakistani Literature Written in English	3 (3-0)
Year I, Semester - II		
ENG-722	New Approaches to Literary Theory & Criticism	3 (3-0)
ENG-723	Research Methodology – II	3 (3-0)
ENG-724	Methods of English Language Teaching	3 (3-0)
ENG-725	Contemporary American Literature	3 (3-0)
Year II, Semester – III & IV		
ENG-740	Research Work & Thesis	6 (6-0)

Ph.D (APPLIED LINGUISTICS)

- PhD (Applied Linguistics) program is envisaged as a three (3) years course. It will be divided into the following components:

Year I, Semester - I		
Course Code	Course Title	Credit Hours
ENG-801	Research Methodologies & Scientific Theories (Core)	3 (3-0)
ENG-809	Wordsworthian Studies - I	3 (3-0)
ENG-810	Post-structuralism	3 (3-0)
Year I, Semester - II		
ENG-813	Cognitive Psychology	3 (3-0)
ENG-816	Pragmatics	3 (3-0)
ENG-817	Wordsworthian Studies – II	3 (3-0)
Year II-III		
ENG-740	Research Work & Thesis	24 (24-0)

DEPARTMENT OF PASHTO

Introduction

- Amongst other sister languages of her family, Pashto is one of the living languages of Indo-Iranian stock. It is estimated that Pashto was spoken almost 1000 BC in the Bactrian rangelands and settled communities around river Oxus. The excavations of the historical sites validate interesting revelations about the people of this part of the world. Pashto as a language and value system caters to the life of an ordinary Pashtoon. Score of scholastic projects are carried out on the study of Pashto, Pashtoons and Pashtoonwali mainly during the colonial era. In the post colonial era, academic and research institutions in Afghanistan and today Khyber Pakhtunkhwa started institutional basis that helped in practicing teaching and research as disciplines in Pashto language and literature.
- In order to study the literary and cultural capitals of the Pashtoon areas, diploma level courses of Pashto Adeeb, Fazal and Aalim were started in 1886 through Pakistan Study Center. The department of Pashto gradually evolved in 1992 while offering two years master degree programs. Professor Wali Muhammad Sial Kakar was one amongst the other pioneers who head Pashto department as the first chairperson.
- Since inception, the department of Pashto has crossed several milestones of its growth and development. It has designed and developed effective masters, M.Phil and PhD programs. It has a full fledge faculty with highest academic credentials of PhD, developed “Khan Shaheed Digital Library”, and has a department library with above 4000 books. The department has also incepted a bilingual and biannual research journal “TAKATOO: that is recognized by HEC in category “Y”.

Objectives

- To develop a conducive learning and practice environment for creating motivated young scholars, researchers, practitioners and literary and cultural activists regarding Pashto language and culture that will enrich the public sector research, development, educational and cultural institutions.
- To foster study programs that can maximize the possibilities of carrying out interventions for the promotion of Pashto language, literature, culture and history that will also transcend the existing knowledge base and research paradigms.

Job Opportunities

- Education / research in Public / Private Sectors.
- Electronic and Print Media.
- Interpreter / Translator in Public / Private Sectors.
- Archeology and history in lok versa.
- Literary / Cultural institutions.

Faculty Members

S.#	Name	Designation	Qualification
1	Dr. Faizullah Panezai	Professor/ Cahirperson	Ph.D
2	Dr. Naseebullah Seemab	Professor	Ph.D
3	Dr. Javed Iqbal	Assistant Professor	Ph.D

Programs

- M.Phil in Pashto by approved criteria of HEC (courses detail available on UOB website).
- PhD in Pashto by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil is Two years and for PhD, it is Three year.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A./F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
- Minimum CGPA of 2.50 on a scale of 4.00 in BS/BE/M.Sc./MCS on semester system or 50% marks in M.A. / M.Sc. on Annual System is required for admission to M.Phil/MS. Minimum 3.00 on a scale of 4.00 on semester system or 60% marks in M.Phil/MS is required for admission to PhD.
- M.Phil/MS & PhD degree program will be open for all those who qualify the admission criteria. However, serving candidates will have to submit N.O.C from their respective departments along with the application form. A study leave document from their respective employer for a period of two years has to be submitted at the time of admission. The candidate will be a full time regular student for two years to complete the course work and research/thesis work.

M.Phil

SEMESTER BREAKUP

Compulsory		لومړی سمسټر (لازمي)	
نمبر شمار	کورس کوډ (پرچه)	کورس کوډ	کریډټ آورز
01	پښتو ادبیات له شروع نه تر "د نولسمي پېړۍ وړستۍ لسیزي	Psh701	کور کورسز 09 کریډټ اورز
02	پښتو شاعري کښي صوفیانه روایت	Psh702	
03	پښتو ژبه او ادب کښي د مستشرقینو خدمات	Psh703	

Elective (اختياري) لومړی سمسټر			
نمبر شمار	کورس کوډ (پرچه)	کورس کوډ	کریډیټ اورز
04	فولکلور	Psh704	03
02		کل کریډیټ اورز	12
		اختياري کورسز کریډیټ اورز 03	

Compulsory (لازمي) دویم سمسټر			
نمبر شمار	کورس کوډ (پرچه)	کورس کوډ	کریډیټ اورز
05	اصول تحقیق	Psh705	03
06	د پښتو ادب جدید دور، د شلمې پېړۍ د شروع نه تر ۲۰۰۰ پوري	Psh706	03
07	تنقید، د تنقید اصول او قاعدې، نړیوال تنقیدي شخصیات	Psh707	03
	په ایچ سی ریسرچ جرنال کي یو پیپر شائع کول		

Elective (اختياري) دویم سمسټر			
نمبر شمار	کورس کوډ (پرچه)	کورس کوډ	کریډیټ اورز
08	د پښتو اولسي او داستاني ادب	Psh708	03
02		کل کریډیټ اورز	12
		اختياري کورسز کریډیټ اورز 03	

$$09+09=18$$

$$03+03=06$$

$$06$$

کل کریډیټ اورز کور کورسز

کل کریډیټ اورز اختياري کورسز

مقاله نگاري کریډیټ اورز

زباني امتحان viva voce

$$30$$

کل کریډیټ اورز

Ph.D

لومړی سمسټر (لازمي)

نمبر شمار	کورس کوډ (پرچہ)	کورس کوډ	کریډټ آورز	
01	تحقیق او د مقاله نگاری فن	Psh809	03	کور کورسز 09 کریډټ اورز
02	ادبي اصناف	Psh810	03	
03	پښتو ادب او رومانیت	Psh811	03	
	کښي یو HEC Recognized Journal تحقیقی مقاله شاع کول	کل کریډټ اورز	09	

دویم سمسټر (لازمي)

نمبر شمار	کورس کوډ (پرچہ)	کورس کوډ	کریډټ آورز	
06	تصوف، پښتو ادب او تصوف	Psh802	03	کور کورسز 09 کریډټ اورز
07	پښتو ادب او سیک هندي	Psh813	03	
08	پښتو ادب او جمالیات	Psh814	03	
	مدافعتي سیمینار	کل کریډټ اورز	09	

$$03+03=18$$

20

38

کل کریډټ اورز کور

مقاله نگاری کریډټ اورز

کل کریډټ اورز

Facilities

- Departmental Library
- Books & Research journals 1300
- Computer Lab
- Digital Library

DEPARTMENT OF PERSIAN

Introduction

- Persian language and literature have influenced the Central Asia and South Asian cultures and languages for almost millennia. The development of literary genres and forms of poetic and artistic expression directly impacted particularly the written literature of languages and people living in India and Pakistan. The construction of world famous epics like Shahbama, and the legendary poetic and imaginative dictions of Hafiz Sherazi, Jalaludin Rumi, Bedil, Firdousi and Sheikh Saadi have always been central and representing stuff of the orient.
- Department of Persian was established alongside the departments of local languages at University of Balochistan. Since inception, the department has been instrumental to engaged motivated young students who seek their career in the domain of Persian language and literature. The department has been offering extensive master degree program in Persian language and literature and intends to seek viable study programs of M.Phil and Ph.D.

Objectives

- To develop an encouraging environment of learning and practice in the department that will capacitate the young scholars, writers, researchers and artists seeking their career in the domain of Persian language and literature and that will rendered pool of high quality human resource to serve the national and regional level literary, research and academic institutions.
- To preserve and develop the historical and literary assets and heritage of Persian in Baluchistan that will be instrumental to foster scholastic and literary linkages amongst the various ethnic groups of Baluchistan that can bring peace, pluralism and social harmony as one of the outcomes of academic and research endeavors.

Job/Career Opportunities

- Educational and Research Institutes at Colleges/Universities etc.
- Radio and Television Networks.
- Field based journalist and reporting
- Translators and Interpreters.

Faculty Members

S. #	Name	Designation	Qualification
1	Dr. Bilal Ahmed Sasoli	Assistant Professor/ Chairperson	Ph.D
2	Syed Roohullah Naqvi	Assistant Professor	Ph.D
3	Dr. M. Ali Shah	Assistant Professor	Ph.D

Programs

- M.Phil in Persian by approved criteria of HEC (courses detail available on UOB website).
- PhD in Persian by approved criteria of HEC (courses detail available on UOB website).
- The minimum time limit for M.Phil is Two years and for PhD, it is Three year.

Eligibility

- The applicant seeking admission in M.Phil/M.S program must have passed minimum sixteen years of education or four years education after F.A./F.Sc. (with minimum 130 credit hours) in the respective subject from HEC recognized institutions. Candidates with a foreign degree equivalent to BS/BE/MA/M.Sc. /MCS/B.Sc. (Hons.) are also eligible for admission in M.Phil/MS.
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SEMESTER BREAKUP

1st Semester

S.No	Course Title	Course Code	Credit Hour
1	Development and Evolution of Persian Language and Literature in the subcontinent	713	03
2	Analytical Study of Epic and Heroic Persian Literature	714	03
3	Stylistic in Persian Prose and Poetry and Literary Genres	715	03
4	Persian Grammar and Academic Writing	716	03

2ND Semester

S.No	Course Title	Course Code	Credit Hour
1	Analytical Study of Lyrical Persian Literature	717	03
2	Bibliographic Sources and Research Methodology	718	03
3	Art of Versification and Rhetoric's	719	03
4	Analytical study of Persian Descriptive Literature	720	03

3rd & 4th Semester

Thesis Writing



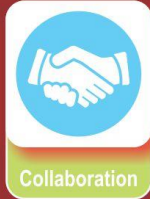
Research



Academic



Invention



Collaboration



Teamwork



Commercialization



Quality



Innovation



Career



Integrity



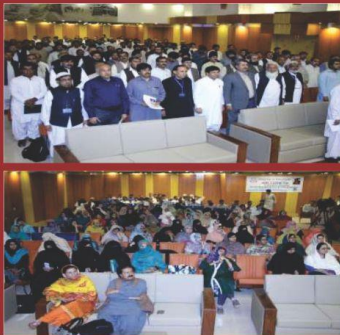
Excellence



Responsibility



Scholarship



Registrar

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