

SCOPE AND OBJECTIVES OF BIOSTATISTICS

For the first time, Dow University of Health sciences is starting MPhil program in Biostatistics. It is the first public sector institution who is offering this course as there is acute shortage of specialists in this field. Students from all over Pakistan are welcomed to register in this program.

A degree in Biostatistics trains students for work in a wide variety of challenging positions in government, industry, and education. Biostatisticians will be trained in the skilled application of statistical methods to the solution of problems encountered in public health and medicine. There has always been a strong demand for well-trained Biostatisticians. Graduates will found careers involving teaching, research, and consulting in such fields as medicine, public health, life sciences, survey research, and computer science. Graduates with the statistical background, undertaking this MPhil program will further enhance their understanding of health issues and the application of statistics.

Biostatistics is the application of statistical science to research in health-related fields including medicine, biology, public health, nursing and pharmacy. The objective of Biostatistics is to advance statistical science and its application to problems of human health and disease, with the ultimate goal of advancing statistics. The role of biostatisticians is an important one, especially when it comes to designing studies and analyzing data from research problems. Biostatisticians help in formulating the scientific questions to be answered, determine appropriate sampling techniques, coordinate data collection procedures, and conduct statistical analyses to answer those scientific questions. Biostatisticians also play vital role in the preparation of research material for publication.

1. OBJECTIVES OF MPhil PROGRAM

- To cater for graduates who wish to have better career prospects, to enhance their knowledge in new spheres of Biostatistics.
- To produce students who are able to carry out research and supervise postgraduate studies in their respective areas of specialization.
- To produce professionals with wide knowledge of Biostatistics and ability to apply these techniques to the Public Health issues.
- To provide basic skills of synthesis and critique relevant published research literatures.
- To develop professional who can have a critical approach to the evaluation of their own and others research work.

2. PROGRAM STRUCTURE

- MPhil program would be a two-year, comprising of 4-semester. After conversion into PhD., minimum three years are required for its completion; comprising of 1 year(2 semesters) of course work and two years of research.
- Ideally MPhil thesis has to be completed by the end of the second year of registration. However, thesis must be completed by the end of the third year; else the student status will be decided by the BASR.
- The internship requirement should be completed during summer session.

3. NUMBER OF SEATS

- Total number of seats are 15.

4. PROGRAM REQUIREMENTS

- All the selected students will require to complete:
 - i) 12 courses (30 credit hours) for MPhil and 7 courses (18 credit hours) for PhD.
 - ii) 6-8 weeks internship program (certificate required).
 - iii) Research theses for both MPhil and PhD program.

5. PROGRAM TIMINGS

3:00 – 6:00 pm(except Fridays, Sundays and holidays).

6. REQUIREMENTS OF THESIS

Please see section 6 of MSBE program.

7. TIME LINE FOR STUDENTS

The students must complete their required 12 credit courses of MPhil. and 7 credit courses for Ph.D. The internship program may be completed after the 2nd Semester. The M.Phil thesis has to be completed by the end of the second year of registration. However, the thesis must be completed by the end of the third year; else the case will be decided by the Board of Advanced Studies and Research (BASR) of the university. If student get the 3 CGPA in the M. Phil and pass the GAT (Subject) then he /she may admit in the Ph.D program.

8. PROGRESS REQUIREMENT

The Board of Advanced Study and Research (BASR) will require a student to withdraw from the program if he/she is not making adequate progress. This progress include: following the time line recommended above, regularly meeting with the thesis supervisor and maintaining a continued effort on the thesis research as well as maintaining at least C average in course work.

9. FACULTY

9.1 FULL TIME

- (1) Dr. Nazeer Khan (2) Dr. NighatNisar (3) Mr. KhurramZaki
(4) Ms. Mehwish Hussain (5) Mr. AbdurRasheed(6) Mr. Syed Arif Ali
(7) Mr. Syed Adnan Ali (8) Prof. RaheelIrfan(9) Dr. MasoodQureshi
(10) Dr. Nazrul Hussain (11) Dr. Syed Saud Hasan (12) Dr. TalatMirza

9.2 VISITING FACULTY

From other institution, like: Karachi University, Aga Khan University

10. CURRICULUM

10.1 MPhil COURSE OUTLINE

10.1.1 SEMESTER I (February 2012- June 2012 including 2 weeks semester break)

(12 credit hours, 3 credit hours for each unit)

- 1) M-701----- Basic Medical Sciences I (Anatomy, Physiology, Pharmacology, Pathology etc.)
- 2) M-702----- Research Methodology.
- 3) M-703----- Advanced Regression.
- 4) M-704----- Advanced Computer Programming

10.1.2 SEMESTER II(July 2012-November 2012 including 2 weeks semester break)

(12 credit hours, 3 credit hours for 705 and 708, 2 credit hours for 706, 707 and 709)

- 1) M-705----- Epidemiology I.
- 2) M-706----- Longitudinal and Survival Data Analysis.
- 3) M-707----- Categorical Data Analysis.
- 4) M-708----- Multivariate Data Analysis
- 5) M-709----- Technical writing for professionals

10.1.3 OTHER ACTIVITIES(December 2012-February 2013)

- 6-8 weeks----- Internship
- 2 weeks----- Synopsis Defense + Retake of examination

10.1.4 SEMESTER III (March 2013-July 2013 including 2 weeks semester break)

(6 credit hours, 2 credit hours for each unit)

- 1) M-709----- Epidemiology II.
- 2) M-710----- Clinical Epidemiology.
- 3) M-711----- Clinical Trials

10.1.5 SEMESTER IV

(6 credit hours)

MPhil Thesis Research

Total Credit Hours: 36

10.2 PhD COURSE OUTLINE

10.2.1 SEMESTER I(February 2014- June 2014 including 2 weeks semester break)

(10 credit hours, 3 credit hours for M-801,802 and 803 and 1 credit hour for 804)

credit hour for 803)

- 1) M-801----- Special Topic I.
- 2) M-802-----AppliedAdvanced Regression Analysis.
- 3) M-803----- Applied Advanced Multivariate Analysis
- 4) M-804----- Advanced Sampling Technique

10.2.2 SEMESTER II(July 2014-November 2014 including 2 weeks semester break)

(8 credit hours, 3 credit hours for 805 and 806 and 2 credit hour for 807)

- 1) M-805-----Special Topic II.
- 2) M-806----- Recent Advancement In Regression and Multivariate Analysis
- 3) M-807----- Basic Medical Sciences II (Anatomy, Physiology, Pharmacology, Pathology etc.)

10.2.3---10.2.4 SEMESTER III ----- VI

PhD Thesis Research

Total Credit Hours: 18

11. GRADING SYSTEM

Please see section 11 of MSBE program.

12. ADMISSION PROCEEDURE

Please see section 12.1and 12.2 of MSBE program.

12.3 ENTRANCE TEST

- All eligible candidates will have to appear in the entrance test to be held on: 2nd January,2012 at Dow Medical College campus, Dow University of Health Sciences, Karachi.
- The entrance for admission is valid only for the current session2012.
- The admit card will be dispatched via courier.
- In case the candidate does not receive the admit card by 28th December 2012, he/she should send the email or contact admission cell DUHS. **E-mail: admissions@duhs.edu.pk**
- The sample test will be available on DUHS website.
- Final merit list will be displayed on the website, based purely on merit on 7th January, 2012.
- Interview for selection, verification of documents and submission of fee will be held on 14thJanuary, 2012.

Note: Please keep visiting DUHS website frequently for any notice or change.

ENTRANCE TEST FEE:

Each application for admission shall be accompanied by a non-refundable entrance test fees of Rs.1000/= in the form of a pay-order in favor of The Dow University of Health Sciences, Karachi.

ELIGIBILITY CRITERIA:

- Applicants for admission in this program must have 16 years of education with first division in B.S/M.Sc.(Statistics)or /B.S (Actuarial Sciences) from a recognized University, approved by Higher Education Commission of Pakistan (HEC).

SUBJECTS FOR ENTRANCE TEST PREPARATION:

The entrance test will comprise 80% knowledge of statistics and 10 % knowledge of mathematics and logical reasoning each.

FINAL MERIT LIST:

The Candidates will be selected on the basis of entrance test marks only.

12.4 DOCUMENT REQUIRED WITH THE APPLICATION FORM:

- B.S /M.Sc. (Statistics) or /B.S (Actuarial Sciences) degree
- Certificate of Matriculation exam/'O' level/Equivalent
- Candidate National Identity Card (NIC)
- Six recent passport size photographs of the candidate (3 attested from front and three from back)
- A certificate of affidavit/declaration, with statement to abide by the rules and regulations of admission
- Copy of GAT (General) test result
- GRE / TOFEL/ IELTS Certificate, if applicable, in case of foreign candidates.
- Pay order of Rs. 1000/- in favor of Dow University of Health Sciences as entrance test fee, which is non-refundable.

13 RULES AND REGULATION

Please see section 13 of MSBE program.

14. DOW UNIVERSTIY STUDENTS CONDUCT RULES

Please see section 14 of MSBE program.

15. ELIGIBILITY OF EXAMINATION

Please see section 15 of MSBE program.

16. LIBRARY

Please see section 16 of MSBE program.

17. IDENTITY CARD

Please see section 17 of MSBE program.

18. DECLARARION/UNDERTAKING IAFFIDAVIT ON STAMP PAPER

Please see section 18 of MSBE program.

19. RULES FOR THE PAYMENT OF FEE

Please see section 19 of MSBE program.

20. SCHEDULE FOR ADMISSION TO FIRST SEMESTER MPhil/PhD SESSION 2012

S.No.	SCHEDULE	DATE
1	Availability of prospectus and application forms	12 th December, 2011
2	Last date for submitting application	24 th December, 2011
3	ENTRY TEST	2 nd January, 2012
4	Display of the initial merit list	7 th January, 2012
5	Interview for selection, verification of original documents and submission of fee	14 th January, 2012
6	Orientation Day	28 th January, 2012
7	Start semester	1 st February, 2012