

**Rules and Guidelines**  
The BS (Hons) and MS degree programs  
under the Grading System

**Published by :** Dr. Mohammed Abdul Aziz  
MS (Hons) & PhD (Kharkov), Postdoc (UPenn, USA)  
Dean  
Faculty of Science  
Professor of Chemistry  
Senate & Syndicate Member  
University of Dhaka  
Dhaka- 1000, Bangladesh  
Phone: +88-02-58613484  
+88-02-9661900-73 Ext. 4344  
*e-mail:* deansc@du.ac.bd

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**University of Dhaka**


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## CONTENTS

### FOREWORD

The BS (Hons) and MS degree programs under the Grading System of the Faculty of Science of the University of Dhaka are conducted under certain Rules and Guidelines. These Rules and Guidelines of the Faculty of Science were adapted in the Faculty meeting after threadbare discussion and subsequently approved in accordance with the general policy of the Academic Council of the University of Dhaka. It is quite imperative that the teachers as well as the students are familiar with these Rules and Guidelines. I wish that my esteem colleagues as well as the students will be benefited from this Handbook.

I express my sincerest gratitude and thanks to my respected colleagues for their support and cooperation in successful compilation of this Handbook.



**(Dr. Mohammed Abdul Aziz)**

Dean, Faculty of Science  
University of Dhaka

01. Faculty of Science	01
02. Department of Physics	01
03. Department of Mathematics	03
04. Department of Chemistry	05
05. Department of Statistics, Biostatistics and Informatics	08
06. Department of Theoretical Physics	09
07. Department of Biomedical Physics and Technology	10
08. Department of Applied Mathematics	11
09. Institute of Statistical Research and Training (ISRT)	13
10. Research Centers	15
11. The Dhaka University Journal of Science	15
12. Guidelines for Letter Grading System for BS (Hons.) Program effective from Session 2010-2011	16
13. Guidelines for Letter Grading System for MS Program effective from Session 2009-2010	24

**FACULTY OF SCIENCE**  
UNIVERSITY OF DHAKA

**Overview**

Dhaka University opened its doors to the students on the 1<sup>st</sup> July 1921 with only three faculties, namely the Faculty of Science, Faculty of Arts and the Faculty of Law. The Faculty of Science started its journey with only three departments namely; Physics, Mathematics and Chemistry. Over the years the Faculty has undergone significant changes. New Departments have been established with the increase of the number of students and subsequently new Faculties have been created to cater the needs of the new Departments.

The Faculty of Science offers four year BS Honours course and one year MS course (both in thesis and non-thesis group). This Faculty is also offering two year M Phil degree and three year Ph D degree. Faculty of Science has awarded M Phil degree to 109 students and Ph D degree to 154 students since its inception.

**Departments under the Faculty of Science**

(1) Physics, (2) Mathematics, (3) Chemistry, (4) Statistics, Biostatistics and Informatics, (5) Theoretical Physics (6) Biomedical Physics and Technology and (7) Applied Mathematics.

**Brief description of Seven Departments**

**Department of Physics**

Year of Establishment: 1921

First Chairman: Professor Dr. W. A. Jenkins

Current Chairperson: Professor Dr. Md. Azizur Rahman

Number of Current Faculties: 32

Number of Students: 1283

*e-mail:* physics@du.ac.bd

**Name of Teachers**

**Professors**

1. Dr. Md. Azizur Rahman (Chairman)
2. Dr. A.F.M. Yusuf Haider
3. Dr. Maqbulur Rahman (LPR)
4. Dr. Nasima Ferdous
5. Mrs. Shamima Choudhury
6. Dr. Amena Begum (LPR)
7. Dr. Hosne Jahan Begum
8. Dr. Md Abdus Sattar
9. Dr. Kazi Monowar Abedin (on leave)
10. Dr. ABM Obaidul Islam (on leave)
11. Dr. Supriya Saha
12. Dr. Md Aminul Islam Talukder (on leave)
13. Dr. Md. Kamrul Hassan

**Associate Professors**

14. Dr. Sabina Hussain
15. Dr. M. Sahabul Alam
16. Dr. Khandker Saadat Hossain
17. Dr. Ishtiaque M. Syed
18. Dr. Md. Mizanur Rahman (on leave)
19. Dr. Md. Wahadoszamen
20. Mr. Golam Dastagir Al-Quaderi
21. Dr. Md. Dalilur Rahaman
22. Dr. Naureen Ahsan
23. Dr. Ratan Chandra Gosh
24. Dr. Md Naimul Islam

**Assistant Professors**

25. Dr. Mohammad Shahjahan (on leave)
26. Mr. Alamgir Kabir (on leave)
27. Mrs. Kazi Haniem Maria (on leave)
28. Mr. Mahabub Alam Bhuiyan
29. Mr. Zulfiqar Hasan Khan (on leave)

### **Lecturers**

30. Mr. Md. Tareq Mahmud
31. Mr. Enayet Hossain
32. Ms. Athoy Nilima

### ***Research in the Department***

Professor S.N. Bose invented the famous Bose- Einstein statistics in the year 1924 while he was a teacher in this department. Since then all the fundamental particles possessing integral spins are named after him. Since then the Department of Physics is in the forefront of research in many sub-branches of physics, including X-ray diffraction, optical spectroscopy, nuclear and high-energy physics.

The current research fields of the department are solid state physics, high energy physics, physics of liquid metals, general relativity, atomic physics, bio-medical physics, laser physics, physics of low temperature, nuclear physics, atmospheric physics and meteorology, equilibrium and non-equilibrium statistical mechanics etc. A number of faculty members are engaged in collaborative research works with the Universities of USA, Europe and Abdus Salam ICTP in Trieste, Italy.

### **Department of Mathematics**

Year of Establishment: 1921

First Chairman: Professor Bhupati Mohon Sen

Current Chairman: Professor Dr. Amulya Chandra Mandal

Number of Current Faculties: 32

Number of Students: 890

*e-mail:* [math@univdhaka.edu](mailto:math@univdhaka.edu)

### **Name of Teachers**

#### **Professors**

1. Dr. Amulya Chandra Mandal (Chairman)
2. Dr. Md. Abdul Matin
3. Dr. Md. Ainul Islam
4. Dr. Md. Tazibar Rahman
5. Dr. Amal Krishna Halder

6. Dr. Selina Parvin
7. Dr. Razina Ferdausi
8. Dr. Khondokar Mezbahuddin Ahmed
9. Dr. Md. Shahidul Islam
10. Mrs. Shapla Shirin
11. Dr. Mohammad Babul Hasan

#### **Associate Professors**

12. Dr. Salma Nasrin
13. Dr. Samir Kumar Bhowmik(On leave)
14. Dr. Chandra Nath Podder
15. Mr. Md. Kutubuddin(On leave)
16. Dr. Md. Sharif Ullah Mazumdar
17. Mr. Mohammad Reazuddin Molla

#### **Assistant Professors**

18. Mr. Kazi Aminur Rahman (On leave)
19. Mr. S.M. Sohel Rana
20. Mr. Md. Motaleb Hossain(On leave)
21. Mr. Sanwar Uddin Ahmad(On leave)
22. Dr. Nepal Chandra Roy

#### **Lecturer :**

23. Md. Kamrujjaman (On leave)
24. Mr. Goutam Saha (On leave)
25. Mrs. Tania Sharmin Khaleque (On leave)
26. Mrs. Shohana Jahan (On leave)
27. Mr. Md. Rajib Arefin (On leave)
28. Mr. Touhid Hossain
29. Mr. Md. Asadujjaman
  
30. Professor Md. Abdur Rahman (Supernumerary)
31. Professor Dr. Md. Muklesur Rahman (LPR)
32. Professor Sajeda Banu (LPR)

### ***Research in the Department***

Group Theory, Ring Theory, Number Theory, Topology, Functional Analysis, Differential Equations, Complex Analysis, Relativity and Cosmology, Numerical Analysis, Generalized Functions, Operations Research, Mathematical Physics, Fluid Mechanics, Mathematical Hydrology, Magnetohydrodynamics, Mathematical Biology, Differential Geometry, Dynamical Systems, Fuzzy Mathematics, Actuarial and Financial Mathematics.

### **Department of Chemistry**

Year of Establishment: 1921

First Chairman: Professor Sir J. C. Ghosh

Current Chairman: Professor Dr. Nilufar Nahar

Number of Current Faculties: 58

Number of Students: 935

*e-mail*: [chem@univdhaka.edu](mailto:chem@univdhaka.edu)

### **Name of Teachers**

#### **Professors**

1. Dr. Nilufar Nahar (Chairperson)
2. Dr. Md. Abdul Quader
3. Dr. Mohammad Yousuf Ali Mollah
4. Dr. Md. Abdul Aziz
5. Dr. Md. Azizur Rahman
6. Dr. Tofail Ahmed Chowdhury
7. Dr. Md. Anwarul Islam
8. Dr. Shahida Islam
9. Dr. Md. Qamrul Ehsan
10. Dr. Pradip Kumar Bakshi
11. Dr. Omar Ahmed (on sabbatical leave)
12. Dr. Md. Habibul Bahar
13. Dr. Md. Saiful Islam
14. Dr. Farida Begum (on leave)
15. Dr. Umme Kulsum Rowzatur Romman (on sabbatical leave)
16. Dr. Md. Emran Quayum
17. Dr. S. M. Mizanur Rahman
18. Dr. Hosne Ara Begum

19. Dr. Tanvir Muslim
20. Dr. Md. Iqbal Rouf Mamun
21. Dr. Md. Abdul Jabbar
22. Dr. Md. Abu Bin Hasan Susan
23. Dr. Kawsari Akhter
24. Dr. G. M. Golzar Hossain
25. Dr. Md. Mufazzal Hossain
26. Dr. Md. Aftab Ali Shaikh
27. Dr. Mohammad Abul Hossain
28. Dr. Mohammad Shoeb
29. Dr. Md. Abdus Salam
30. Dr. Md. Ahsan Habib
31. Dr. A. Salam

#### **Associate Professors**

32. Dr. Mohammad Arifur Rahman
33. Dr. Tapas Debnath
34. Dr. Md. Mominul Islam
35. Dr. Muhammad Shah Miran

#### **Assistant Professors**

36. Mr. Md. Ershad Halim
37. Mrs. Farhana Khanam Ferdousi (on leave)
38. Mr. Md. Shahidur Rahman (on leave)
39. Mrs. Abida Sultana
40. Mr. Md. Safiqul Islam (on leave)
41. Mr. Shankar Mandal (on leave)
42. Dr. Md. Anamul Haque

#### **Lecturers**

43. Mr. Md. Ariful Haque
44. Mr. A. K. M. Nur Alam Siddiki
45. Mr. Md. Robiul Islam
46. Mrs. Khorshada Jahan
47. Mr. A.Z.M. Mainul Islam Mazumder
48. Mr. Mohammad Rokonuzzaman
49. Ms. Sadia Afrin Chanda

50. Ms. Anamika Shaha
51. Ms. Humaira Akhter
52. Ms. Humaira Yeasmin
53. Ms. Saika Ahmed
54. Mr. Md. Kamrul Hasan
55. Professor N. N. Pasha (Supernumerary)
56. Professor Dr. Tajmeri S. A. Islam (LPR)
57. Professor Dr. Etmina Ahmed (LPR)
58. Professor Dr. Altaf Hussain (LPR)

### ***Research in the Department***

#### ***Inorganic and Analytical Chemistry***

Preparation of inorganic solids and their characterization, Drug-Metal interactions, Interaction of metal ions with macrocyclic compounds, Co-ordination chemistry, Solute-solvent interaction, Waste water treatment, Determination of arsenic in soil, water and food materials, Study of micronutrients, Al and Zn in blood serum.

#### ***Organic Chemistry***

Isolation and structure elucidation of biologically active compounds from medicinal plants and endophytic fungus, Phytochemistry, Studies in organic pollutants in food and environment, Development of anti-diabetics from plants, Isolation and characterization of anticancer compounds, Fatty acid analysis in fat, oil and food materials.

#### ***Physical Chemistry***

Surface chemistry, Electrochemistry, Photochemistry, Nanochemistry, Nanocomposite, Wastewater treatment, Electrocoagulation, Drug-metal interaction, Cyclic voltametry, Solvent-solvent interaction, Micellar catalysis, Oxidative reduction of pollutants in water, Supramolecular Chemistry, Development of new metabolites, Treatment of wastewater containing textile dyes, Uses of tea leaves as an adsorbents etc.

The Department has collaborative research with a number of National (BIRDEM, BARI, BINA etc.) and International (IPICS, Uppsala University Sweden, ISESW etc.) organizations.

### **Department of Statistics, Biostatistics and Informatics**

Year of Establishment: 1950

First Chairman: Professor Dr. Qazi Motahar Husain

Current Chairman: Professor Mrs. Khaleda Banu

Number of Current Faculties: 34

Number of Students: 485

*e-mail:* [stat@du.ac.bd](mailto:stat@du.ac.bd)

### **Name of Teachers**

#### **Professors**

1. Mrs. Khaleda Banu (Chairperson)
2. Mr. Nitai Chakraborty
3. Mr. M A Jalil
4. Mr. Md. Lutfor Rahaman
5. Mrs. Sayema Sharmin (on leave)
6. Dr. Jafar Ahmed Khan
7. Dr. Washimul Bari

#### **Associate Professors**

8. Mrs. Murshida Khanam
9. Dr. Taslim Sazzad Mallick
10. Mrs. Sabina Shormin
11. Dr. Md. Belal Hossain
12. Dr. Md. Abdus Salam Akanda

#### **Assistant Professor**

13. Mr. Javed Hossain Tomal (on leave)
14. Mr. Muhammad Abu Shadeque Mullah (on leave)
15. Mrs. Nabila Parveen (on leave)
16. Mr. Jamil Hasan Karami (on leave)
17. Mr. Md. Zillur Rahman Subuz (on leave)
18. Mr. Mohammad Jakir Hossain (on leave)
19. Mr. Md. Golam Rabbani
20. Mr. Mohammad Ahsan Uddin
21. Mr. Shamal Chandra Karmaker (on leave)
22. Mr. Khnd. Md. Mostafa Kamal
23. Mr. A. Z. M. Shafiullah (on leave)
24. Mr. Md. Ershadul Haque

25. Mr. Md. Akhtar Hossain (on leave)
26. Mr. Md. Anamul Haque Sajib (on leave)
27. Mrs. Nahid Sultana Sumi

#### **Lecturers**

28. Mrs. Radia Taisir
29. Mr. Md. Mahfuzur Rahman Khokan
30. Mrs. Farzana Afroz (on leave)
31. Mr. Md. Erfanul Hoque (on leave)
32. Mr. Khondoker Akib Mohammad
33. Most. Fatima-Tuz-Zahura
34. Prof. Shahadat Ali Mallick (Supernumerary)

#### ***Research in the Department***

Applied and theoretical research in the diverse areas of Statistics, Biostatistics, Econometrics, Sampling, Experimental Design, Robust Statistics, Informatics, Meta-Analysis, Data mining etc.

#### **Department of Theoretical Physics**

Year of Establishment: 1975/2008

First Chairman: Professor Dr. A. M. Harun-or-Rashid

Current Chairman: Professor Dr. M. Arshad Momen

Number of Current Faculties: 4

Number of Students: 20 (MS 15, Ph D 5)

*e-mail:* [theoreticalyhy@univdhaka.edu](mailto:theoreticalyhy@univdhaka.edu)

#### **Name of Teachers**

##### **Professor**

1. Dr. M. Arshad Momen (Chairman)
2. Dr. Golam Mohammad Bhuiyan

##### **Assistant Professor**

3. Dr. Tanvir Hanif
4. Muhammad Ruhul Amin (on leave)

#### ***Research in the Department***

Particle Physics and Condensed matter Physics aiming to develop fundamental and Interdisciplinary Sciences.

#### **Department of Biomedical Physics and Technology**

Year of Establishment: 2008

First Chairman: Professor Dr. Khandaker Siddique-e-Rabbani

Current Chairman: Professor Dr. Khandaker Siddique-e-Rabbani

Number of Current Faculties: 3

Number of Students: 8 (M Phil 5, Ph D 3)

*e-mail:* [rabbani@univdhaka.edu](mailto:rabbani@univdhaka.edu)

#### **Name of Teachers**

##### **Professor**

1. Dr. Khondkar Siddique-e- Rabbani (Chairman)

##### **Assistant Professor**

2. Muhammad Abdul Kadir

##### **Lecturer**

3. A. B. M Hasan Talukder

#### ***Research in the Department***

Design and Develop low cost medical instruments for technology dissemination in the Third World. The research group of Biomedical Physics and Technology has already achieved significant innovations in following fields, (i) Destruction of diarrhoeal germs in water at low cost using simple and easily available materials, which also provide an indirect means of solving arsenic problem. (ii) A novel Focused Impedance Method (FIM) with significant potential in the detection and diagnosis of disorders and disease of lungs, stomach and certain cancers, in monitoring of radiotherapy, etc. This idea has received international acclaim on which

Universities in UK and Korea have already started work. (iii) Discovery of a new neuro physiological parameter named Distribution of F-latency (DFL), having potential in the detection and diagnosis of peripheral neuropathy. iv) Design and development of low cost medical instruments for technology dissemination in the Third World.

Internationally recognised Professor S. N. Bose of Physics, Qazi Motahar Hossain of Statistics, M. H. Khundkar of Chemistry were associated with this Faculty. These eminent scientists made extraordinary contributions in science.

### **Department of Applied Mathematics**

Year of Establishment: 2014

First Chairman: Professor Dr. Md Abdus Samad

Current Chairman: Professor Dr. Md Abdus Samad

Number of Current Faculties: 11

Number of Students: 8 (M.Phil, Ph.D.), 88 (MS)

*e-mail*: appliedmath@du.ac.bd

### **Name of Teachers**

#### **Professors**

1. Dr. Md Abdus Samad (Chairman)
2. Dr. Md. Nurul Islam
3. Dr. Md. Mubarak Hossain
4. Dr. Md. Shafiqul Islam
5. Dr. Md. Showkat Ali

#### **Associate Professor**

6. Dr. Muhammad Ferdows

#### **Assistant Professors**

7. Dr. A B M Shahadat Hossain
8. Dr. Litan Kumar Saha
9. Dr. Md. Zavid Iqbal Bangalee

### **Lecturers**

10. Mr. Md. Rakib Hossain
11. Kajal Chandra Saha

### ***Research in the Department***

From the establishment of the University of Dhaka as well as the Department of Mathematics (since 1921) students have been awarded MS degree in Applied Mathematics. Since then, research have been carried out in various fields of Applied Mathematics. A number of students have been awarded M.Phil and Ph.D degree from the department. At present 8 students are doing their M. Phil and Ph.D research in different areas of Applied Mathematics.

### ***The Major area of research includes***

#### ***Fluid Mechanics***

Fluid Mechanics is one of the most important branch of Applied Mathematics. In this branch a number of articles have been published each in the national and international journals.

This year (2010-2011) and in the previous year (2009-2010) two faculties from this department have been awarded the prestigious Dean's award from the Faculty of Science. The area including Newtonian and non-Newtonian fluids for industrial applications, Magnetohydrodynamics, Aerodynamics, Mathematical Hydrology, Bio-fluid Mechanics, Nano-fluids, Computational Fluid Mechanics and more. Students in both M. Phil and Ph.D. level have been doing their research in Fluid Mechanics.

#### ***Numerical Methods***

Another important area of Applied Mathematics is the study of various numerical methods and techniques because of the application in all other branches of Physical and Scientific Computations. Both M.Phil and Ph.D research have been conducting in this field.

#### ***Theory of Relativity and Cosmology***

Theory of Relativity is one of the main research area in Mathematics and Physics. Cosmology is also now a very important field for research in modern Mathematical Physics in the Applied Mathematics over the world.



This field of research (M. Phil, and Ph. D) contributes significant results in Physical Sciences.

### ***Riemannian Geometry and Tensor Analysis***

Riemannian Geometry is an important area for mathematical research, especially for M. Phil and Ph.D studies in Applied Mathematics. Modern differential geometry now generalizes Riemannian geometry. At present many students are doing their research in this field and contributing their valuable results in Mathematical Physics and engineering.

### ***Financial Mathematics***

This branch of Applied Mathematics is a very recent area of research. A few number of Universities in the world have been conducting class room teaching and research in this area. The department of applied mathematics of the University of Dhaka is going to initiate class room teaching as well as research in this field.

The Department of Applied Mathematics will also open Meteorology very soon which is also an important area of research due to its application for weather forecast.

### **Institute of Statistical Research and Training (ISRT)**

Year of Establishment: 1964

First Director: Professor Qazi Motahar Hussain

Current Director: Professor Muhammad Shuaib

Number of Current Faculties: 28

Number of Students: 272

Website: [www.isrt.ac.bd](http://www.isrt.ac.bd)

#### **Professors**

1. Mr. Muhammad Shuaib (Director)
2. Dr. Pk. Md. Motiur Rahman (Supernumerary Professor)
3. Dr. Md. Sekander Hayat Khan (Extra-ordinary leave)
4. Dr. Syed Shahadat Hossain
5. Dr. Azmeri Khan
6. Dr. Md. Amir Hossain

7. Mrs. Begum Zainab
8. Dr. Abu Hena Md. Mahbub-ul Latif
9. Dr. Ohidul Islam Siddiqui

#### **Associate Professors**

10. Dr. Md. Israt Rayhan
11. Dr. Md. Asaduzzanan (Extra-ordinary leave)
12. Dr. Tamanna Howlader
13. Dr. Mohammad Shahed Masud
14. Dr. Md. Muhammad Shafiqur Rahman
15. Mrs. Jahida Gulshan

#### **Assistant Professors**

16. Mr. Mohammad Lutfor Rahman
17. Mr. A. S. M. Borhan (on study leave)
18. Mr. Muhammad Iftakhar Alam (on study leave)
19. Mr. Md. Anower Hossain (on study leave)
20. Mrs. Yesmin Akhter (on study leave)
21. Mr. Md. Mahsin (on study leave)
22. Dr. Md. Hasinur Rahaman Khan
23. Mr. Paritosh Kumar Roy

#### **Lecturers**

24. Mrs. Farhana Sadia
25. Mr. Md. Rashedul Hoque
26. Mr. Md. Shaddam Hossain Bagmar
27. Mr. Mohammad Samsul Alam
28. Mr. Nabil Awan

#### ***Research in the Institute***

Institute of Statistical Research and Training, popularly known as ISRT, was established in 1964 by a statute of the University of Dhaka. The institute maintains a vibrant academic and research environment encompassing a rich library with over 20,000 books and research journals, and three state-of-the-art computer labs--two for teaching and one for research; enough printing and internet facilities. The institute has a server and all computers are connected with that server. The institute offers a 4-

year honor's and 1-year master's program in Applied Statistics. It also offers Ph.D. and M.Phil programs depending on the availability of students and faculty members in a chosen area.

The institute is the proud publisher of the Journal of Statistical Research (JSR), a prestigious bi-annual journal in statistical sciences, published since 1970. It is an internationally renowned journal in the field of statistics.

The institute organizes training programs, independently as well as in collaboration with other organizations, on various topics, such as research methodology, statistical techniques for epidemiological research, monitoring and evaluation, and bio-medical research. The Institute offers training courses on basic statistics and computer packages, like SPSS, SAS, Stata etc. Apart from these, other events like seminars, symposiums, and workshops are regularly organized by the Institute.

#### ***Journal published from Institute***

An international journal named Journal of Statistical Research (JSR) is regularly published by the Institute since 1966. The JSR is published twice a year. Each volume has two separate issues, one published in June and the other in December.

#### ***Research Centers***

There are three research centres under the Faculty of Science:

- Bose Centre for Advanced Study and Research in Natural Sciences (Director: Professor Shamima K Chowdhury),
- Semiconductor Technology Research Centre (Director: Professor Dr. Zahid Hasan Mahmood)
- Organic Pollutant Research Centre (Director: Chairman, Department of Chemistry).

The centers provide research grants for Faculty members.

#### **The Dhaka University Journal of Science**

The Faculty of Science regularly publishes, *The Dhaka University Journal of Science* twice a year. Professor Dr. Mohammad Yousuf Ali Mollah of the Department of Chemistry is the current Editor in Chief of the Journal.

## **BS (Hons.) Program**

### **Guidelines for Letter Grading System for BS (Hons.) Program**

*for all the departments under the Faculty of Science & ISRT*  
**Session 2010-2011 and onward**

#### **1. The BS (Hons.) Degree Program**

The BS (Hons.) degree program in the Faculty of Science, Dhaka University is a 4-year program comprising of four academic sessions, each having a duration of 12 calendar months to be distributed as follows:

30 weeks	for holding classes
4 weeks	preparation for examinations
6 weeks	annual examination and publications of results
12 weeks	vacation and holidays

#### **2. Definition of a Credit**

The credit is defined as follows:

- (i) For theoretical courses, 15 class hour of 50 minutes each = 1 credit
- (ii) For practical courses, 30 hour lab work = 1 credit

#### **3. Credit Requirements for the 4 year BS (Hons.) Degree**

The total credits for the 4-year BS (Hons.) degree and their distribution among theory and practical courses and assignments/oral presentations will be decided by the individual Departments/Institutions. However, the following constraints are operative:

(i) Total credits	: 128 - 145
(ii) Maximum number of credits for practical courses/projects/field study	: 36
(iii) Credits for assignments/oral presentation	: 4-8

#### 4. Grades and Grade Points

Grades and grade points will be awarded on the basis of marks obtained in the written, oral and practical examinations according to the following scheme:

Marks Obtained (%)	Grade	Grade Point
80-100	A+	4.00
75-79	A	3.75
70-74	A-	3.50
65-69	B+	3.25
60-64	B	3.00
55-59	B-	2.75
50-54	C+	2.50
45-49	C	2.25
40-44	D	2.00
less than 40	F	0.00
	I	Incomplete
	W	Withdrawn

Only 'D' or higher grade will be counted as credits earned by a student.

**A student obtaining 'F' grade in any course (theory and practical) will not be awarded degree.** Student with 'F' grade in any course, shall be allowed to improve twice/two times only with the following batches.

**GPA:** Grade point average (GPA) is the weighted average of the grade points obtained by the students in all the courses completed by the student in a year. GPA will be calculated according to the following formula:

$$\text{GPA} = \frac{\sum (\text{grade points in a course credits for the course})}{\text{total credits taken}}$$

CGPA = cumulative GPA for different years.

#### 5. Assessment and Evaluation

The performance of a student in a given course will be evaluated in the following way:

- (i) For a theory course the assessment will be made by in-course exams/assignments/performance evaluation in the class/final examinations.
- (ii) The assessment of laboratory and/or field courses will be made by observing overall performance of the student at work, viva-voce, assignments and evaluation of practical reports.

At the beginning of each academic session, an examination committee is to be constituted for that session by the respective department or institute. The Chairman of the Examination Committee will act as a course co-ordinator for that session. The examination committee will have a Chairman, two internal members and an external member.

- (iii) Third Examination: Under double-examiner system and in case of difference of above 20% of marks, there will be a 3<sup>rd</sup> examiner. Marks of nearest two examiners (theory and thesis) will be average out as final marks.

#### 6. The Distribution of Marks for a Course. It will be as follows:

##### (a) Theory Course

Class attendance	05%
In-course assessment	25%
Course final examination	70%

**(b) Practical Course**

Class assessment including class attendance	40%
Course final examination	60%

**(c) Marks for Attendance**

Attendance (%)	Marks (%)
90 and above	05
85 to 89	04
80 to 84	03
75 to 79	02
60 to 74	01
Less than 60	00

**(d) In-course Assessment for Theory Courses**

- (i) In-course assessment may be done by taking class test and/or by giving assignments.
- (ii) The course teacher will announce the dates of in-course examinations at the beginning of the course. The in-course assessment will be of one hour duration and the teacher concerned will be responsible to assess the students sitting in his/her course. There will be 2 tests for 3 and 4 credit course and one for 2 credit course. For 3 and 4 credit courses average of the two should be considered to finalize the grade.
- (iii) Maximum duration of in-course tests will be one class hour.
- (iv) Questions for in-course tests may preferably be of multiple choice (MCQ) type. Students may also be evaluated by giving short questions as decided by the course teacher.

**Answer scripts must be shown to the students.**

- (v) Course teachers must announce results in 4 weeks of holding the examination.
  - (vi) Marks for in-course assessment must be submitted by the course teacher to the Chairman of the Examination Committee and the Controller of Examinations before the final examination.
  - (vii) No make-up test will be arranged for a student who fails to appear in in-course test/tests. Absence in any in-course test will be counted as zero for calculating the average in in-course test for that course. However, a student can apply to the Chairman/Chairperson of the relevant department for make-up test if recommended by the respective course teacher. The Chairperson/Chairman will only place the application before the academic committee if the particular student has met with an accident or his/her parents have expired or he/she has gone through a surgical procedure or any other such situation which the Academic Committee feels can be considered. The make-up test must be held during the course period.
- (e) Course Final Examination (Theory and Practical Courses)**
- (i) Student having 75% or more attendance on average (collegiate) are eligible to appear in the final examination.
  - (ii) Student having 60-74% attendance are considered to be non-collegiate and will be eligible to sit for the final examination on payment of fine Tk. 7,500/- (Seven thousand).
  - (iii) Student having attendance less than 60% will not be allowed to sit for the final examination but may seek readmission in the program.
  - (iv) The year final examinations will be conducted centrally by the Controller of Examinations as per existing rules.

- (v) The duration of theoretical course final examinations will be as follows:

Credit	Duration of Examination
4 credits course	4 hours
3 credits course	3 hours
2 credits course	2.5 hours

- (vi) Duration of practical examinations will be between 4 - 6 hours irrespective of credit hours.
- (vii) For theoretical course final examinations, there will be two examiners: course teacher will be the first examiner and the second examiner will be from within the department or from any other department of Dhaka University relevant to the subject. In case a suitable examiner is not found from Dhaka University, a teacher from outside Dhaka University may be appointed as second examiner with prior permission from the Vice-Chancellor. Evaluation will be made under the existing rules.

#### 7. Promotion to the Next Academic Year

A student has to attend courses required for a particular year, appear at the annual examinations and score a minimum specified GPA/CGPA for promotion to the next year.

Promotion to the next year will be given if a student scores minimum GPA/CGP A as follows:

1 <sup>st</sup> year to 2 <sup>nd</sup> year	GPA	2.00	(D)
2 <sup>nd</sup> year to 3 <sup>rd</sup> year	CGPA	2.25	(C)
3 <sup>rd</sup> year to 4 <sup>th</sup> year	CGPA	2.50	(C+)

#### 8. Requirements for the Award of the BS (Hons.) Degree. They are as follows:

- (i) Minimum number of required credits must be earned in the maximum period of six academic years starting from the date of 1<sup>st</sup> year of admission.
- (ii) Must have CGPA of at least 2.5

#### 9. Time Limits for Completion of Bachelor's Degree

A student must complete the courses of his/her studies for a BS (Hons.) degree in a maximum period of six academic years.

#### 10. Improvement

- (i) If a student obtains a grade C+ or lower in a course in any year, he/she will be allowed to repeat the term-final examination only once with the following batch for the purpose of grade improvement. A student failing to improve his/her grade in a course can retain the earlier grade.
- (ii) Grade improvement will not be allowed in those courses in which a student obtains grade better than 'C+'.
- (iii) A student will be allowed to repeat a maximum of 20 credits in his/her four years BS Program for grade improvement.
- (iv) Improvement in 4<sup>th</sup> year courses: Students would be allowed to sit for improvement examination in the 4<sup>th</sup> year courses with the following batch, provided they must do it before the publication of final result by the office of the Controller of Examinations or Issuance of Provisional Certificate by the Controller of Examinations.

#### 11. Readmission

- (i) A student can take readmission 2 (two) times throughout the program either in the same class or in different classes. In both cases, he/she must complete the degree by 6 (six) years from the time of original admission.
- (ii) A student may seek readmission and continue studies as a regular student provided he/she has at least 30% attendance in the previous year.

- (iii) On readmission, grades earned earlier by a student in the case of readmission shall, in general, cease to exist and the student has to retake all courses and examinations, but in case if they do not get the opportunity to repeat the courses due to late admission, marks of in-course assessment and laboratory performance/assessments in the previous year may be retained by the students.

## 12. Dean's Award

As a recognition of excellent performance the names of the students may be included in **Dean's Honor Award or Dean's Merit Award** in an academic year without appearing at any improvement examination.

There will be two categories of awards for graduate students:

- (i) **Dean's Honor Award:** students with **CGPA 3.85** and above.
- (ii) **Dean's Merit Award:** students with **CGPA 4.00**

## 7. Other General Regulations

For any matter not covered in the above guidelines, existing rules for Integrated Honours Course of Dhaka University will be applicable.

# MS Program

## Guidelines for Letter Grading System for MS Program *for all the departments under the Faculty of Science & ISRT*

### Session 2009-2010 and onward

1. Course of study for a MS degree in the Faculty of Science shall extend over a period of one academic year. A student can enroll either in Non-thesis or in Thesis Group where applicable. A student must earn a total of 30-36 credits for the award of MS degree. The distribution of credits will be decided by the respective Department/Institute. However, the MS courses in the Faculty of Science will be conducted under the following general rules and regulations.
2. **Admission into MS Courses**  
Students who have completed BS (Hons.) degree from a Department/Institute with minimum CGP A of 2.5 in the scale of 4 will only be eligible for admission to MS courses under the Faculty of Science.
3. **Duration of the Program**  
The duration of MS program will be of 1 (one) academic year to be distributed as follows:

Classes	24 weeks
Time for preparation of final examination	04 weeks
Course final examination	04 weeks
Submission of thesis/projects/practical/examination/ seminar/internship	16 weeks
Publication of results	04 weeks

#### 4. Credits Earned

A student must earn 30-36 credits in order to complete the requirements for the award of MS degree from a Department/Institute in the Faculty of Science.

#### 5. Evaluation of Students

The performances of the students will be evaluated on the basis of continuous assessment and course final examination. The marks in a course will be distributed as follows:

##### (a) Theory Course

	Department/Institute	
	Physics	Others
Class attendance	10%	05%
In-course assessment/tutorial/assignment	30%	25%
Course final examination	60%	70%

##### (b) Practical Course

	Department/Institute	
	Physics	Others
Class attendance	* see 5(c)(i)	05%
In-course (non-thesis) assessment		35%
Course final examination		60%

##### (c) Distribution of Credit for Thesis and Non-Thesis students

The distribution of credits for Thesis and Non-Thesis students will be according to the following format as recommended by the respective Department/Institute.

#### (i) Department of Physics

Thesis		Non-Thesis	
Theory 4 credits × 4	16 credits	Theory 4 credits × 4	16 credits
Thesis	6 credits	Practical **	10 credits
General viva 1×4	4 credits	General viva 1 × 4	4 credits
Oral on thesis I × 4	4 credits	Total	30 credits
Total	30 credits	**Practical exam. = 5 credits Class assessment = 3 credits Project work = 2 credits	

#### (ii) Department of Chemistry

Thesis		Non-Thesis	
Theory 3 credits × 6	18 credits	Theory 3 credits × 7	21 credits
Thesis	10 credits	Practical course 3 credits × 3	9 credits
General viva	2 credits	General viva	2 credits
Oral on thesis	2 credits	Total	32 credits
Total	32 credits		

#### (iii) Department of Mathematics (Mathematics and Applied Mathematics)

Thesis		Non-Thesis	
Theory 4 credits × 6	24 credits	Theory 4 credits × 7	28 credits
Thesis + defense	8 credits (6 + 2)	Viva voce	4 credits
Viva voce	2 credits	Total	32 credits
Total	34 credits		

**(iv) Department of Statistics, Biostatistics and Informatics**

Thesis		Non-Thesis	
Theory compulsory	14 credits	Theory compulsory	14 credits
Theory optional	8 credits	Theory optional	8 credits
Thesis	6 credits	Practical	6 credits
General viva	2 credits	General viva	2 credits
Total	30 credits	Total	30 credits

**(v) Department of Theoretical Physics**

Theory	20 credits
Thesis	4 credits
Thesis defense	2 credits
General viva	4 credits
Total	30 credits

**(vi) Department of Biomedical Physics and Technology**

Thesis		Non-Thesis	
Theory	16 credits	Theory	16 credits
Optional	6 credits	Optional	10 credits
Practical	4 credits	Internship	4 credits
Thesis	4 credits	Oral	2 credits
Oral	2 credits	Total	32 credits
Total	32 credits		

**(vii) Institute of Statistical Research and Training**

	Thesis	Non-Thesis
Theory courses (Compulsory)	4 credits	4 credits
Theory courses (Elective)	15 credits	15 credits
Statistical Computing	3 credits	7 credits
Thesis and defense	6 credits	2 credits
Oral	2 credits	2 credits
Total	30 credits	30 credits

**(d) Marks for Attendance**

Department/Institute			
Physics		Other Department/Institute	
Attendance (%)	Marks (%)	Attendance (%)	Marks (%)
95 and above	10	90 and above	05
90 to 94	08	85 to 89	04
85 to 89	06	80 to 84	03
80 to 84	04	75 to 79	02
75 to 79	02	60 to 74	01
60 to 74	01	Less than 60	00

**6. In-course Assessment (Theory Courses)**

- (i) The course teacher will announce the dates of in-course examinations at the beginning of the course. The in-course assessment will be based on tests/assignments/seminars or class-presentations. The number and distribution of tests/assignments/seminars/class-presentations or any combination of them will be decided by the respective teacher. The in-course assessment will be of one hour duration and the teacher concerned will be responsible to assess the students sitting in his/her course. There will be 2 tests for 3 or 4 credit course and one for 2 credit course. For 3 or 4 credit courses average of the two should be considered to finalize the grade.

**Answer scripts must be shown to the students.**

- (ii) No make-up test will be arranged for a student who fails to appear or wish to re-appear in his/her in-course test/tests. Absence in any in-course test will be counted as zero for calculating the average in in-course test for that course. However, a student can request special permission for re-take of in-course test if recommended by the course teacher through the academic committee of the Department only under extraordinary circumstances (e. g, accident, death of a close-relative, etc.).



## 7. Course Final Examination (Theory Course)

- (i) The course final examination will be conducted by the Controller of Examinations as per existing rules of the university.
- (ii) The course final examination will be of 3 hours or 4 hours duration for 3 or 4 credit course and 2½ hour for 2 credit course.
- (iii) There will be two examiners to evaluate an answer-script. One of them must be the course teacher and the external examiner will preferably be from outside the respective Departments. In case a suitable person is not available as external examiner a teacher from within the Department may be appointed with prior permission from the Vice Chancellor.
- (iv) Examination of practical courses for non-thesis students will be conducted as per existing rules of the University.

## 8. Evaluation of Thesis

- (i) Thesis will be evaluated as per existing rules of the university with two external examiners from outside the respective Department.
- (ii) Oral examination of the MS thesis students will be conducted by the members of Examination Committee consisting of three internal and one external examiners and approved by the Academic Council of the University. Supervisor of a student will be requested to be present at the time of the presentation. He/she may participate in discussion but not in evaluation.

## 9. The Grading System

Marks obtained by a student in different courses will be converted to grades. A basic four point (4.00) grading scale will be followed. The following letter grade and grade point will be used to determine the student's grade point average (GPA).

Marks Obtained	Corresponding Letter Grade	Grade Point
80% or above	A+	4.00
75 to 79%	A	3.75
70 to 74%	A-	3.50
65 to 69%	B+	3.25
60 to 64%	B	3.00
55 to 59%	B-	2.75
50 to 54%	C+	2.50
45 to 49%	C	2.25
40 to less than 44%	D	2.00
Less than 40%	F	0.00

## 10. Improvement

- (i) If a student obtains a grade C+ or lower in a theory course he/she will be allowed to repeat the term-final examination only once with the following batch for the purpose of grade improvement, but he/she will not be eligible to get a grade better than 'B+' in such a course. A student failing to improve his/her grade in a course can retain the earlier grade.
- (ii) A student will be allowed to take improvement of 25% of the total theoretical credits taken.
- (iii) A student obtaining 'F' grade in one or more courses (theory and practical) will not be awarded degree. However, a student obtaining 'F' grade in a course may be allowed to retake that course only once with the next batch of students in order to be awarded a degree. A student obtaining 'F' grades in more than one courses will not be allowed to repeat any course.

### 11. Calculation of GPA

The GPA (grade point average) will be calculated according to the following formula:

$$\text{GPA} = \frac{\sum (\text{grade points in a course credits for the course})}{\text{total credits taken}}$$

### 12. Eligibility for Sitting in Course Final Examination

- (i) A student must attend at least 75% of the total classes in a course held in an academic year to be eligible for appearing in the final examination in a course.
- (ii) A student attending at least 60% of classes in a course will be allowed to sit for course final examination after payment of non-collegiate fees as decided by the University.
- (iii) A student attending less than 60% classes in a course will not be allowed to sit for final examination.

### 13. Readmission

- (i) A student failing to complete the MS course in a year may seek readmission with the next available batch of students, provided he/she applies within one month of publication of the result of the concerned year.
- (ii) A readmitted student will be allowed to retain his/her in- course/class assessment/tutorial marks earned in previous year.
- (iii) A readmitted student may be allowed to take up thesis work as decided by the Departmental Academic Committee.
- (iv) The transcripts of successful readmitted student will bear the letter 'R' after GPA with a foot note explaining 'R' means Readmission.

### 14. Requirements for MS Degree

A minimum GPA of 2.50 on a scale of 4.00 must be obtained in order to be awarded MS degree.

### 15. General Regulations

- (i) The Departmental Academic Committee will design courses of studies, frame syllabuses of different courses, propose examination committee and panel of examiners as per rules of the university.
- (ii) The course teacher will provide the students a course outline, schedule of class assessment and relevant information in the first class of the term.
- (iii) The course teacher shall announce the results of the in-course tests within four weeks of the date of holding the tests and submit the marks to the Chairman of the Examination Committee for the respective batch and also a copy to the Controller of Examinations at least two weeks before the start of the final examination. He/she should also submit a statement showing the total number of classes held and the percentage of attendance of each student in his/her course to the Chairman of the Department.
- (iv) Tabulation work will be started only after all the marks of the course final examinations for the year are received by the Chairman of the Examination Committee. Marks received by the Chairman of the Examination Committee shall remain in the sealed envelope as sent by the Examiner/Examiners until tabulation work is started.
- (v) The present system of conducting course final examination and publication of results by the office of the Controller of Examinations shall continue.
- (vi) For any other matters not covered in these rules, the existing rules of the University of Dhaka will be applicable.