

Dr. A B M Shahadat Hossain

Associate Professor

Department of Applied Mathematics

University of Dhaka, Dhaka-1000, Bangladesh

Email: abmsh@du.ac.bd

Cell: +880 1794368018

Url: goo.gl/gj58HQ



Research Interest:

Financial Mathematics, Financial Time Series Analysis, Econometrics, Mathematical Biology, Dynamical System, etc.

Professional Experiences:

- (a) I have been serving as an **Associate Professor** in the Department of Applied Mathematics, University of Dhaka, Dhaka-100, Bangladesh since *March 22, 2018*
- (b) **Assistant Professor** in the Department of Applied Mathematics, University of Dhaka, Dhaka-100, Bangladesh from *July 01, 2014 to March 21, 2018*.
- (c) **Assistant Professor** in the Department of Mathematics, University of Dhaka, Dhaka-100, Bangladesh from *February 07, 2007 to June 31, 2014*
- (d) I was appointed as **Lecturer** in the Department of Mathematics, University of Dhaka, Dhaka-100, Bangladesh from *April 05, 2003 to February 06, 2007*.
- (e) I started my career as **Junior Lecturer** (full time) in Independent University, Bangladesh (IUB), Dhaka, Bangladesh from August 2001 to April 2003.
- (f) **Visiting Faculty:** School of Computing, Mathematics and Digital Technology Manchester Metropolitan University, UK from *Jan 2012 to Apr 2012*.
- (g) **Guest Faculty:** Independent University of Bangladesh (IUB), North South University (NSU), BRAC University, Military Institute of Science and Technology (MIST), Bangladesh University of Professionals (BUP), East West University, University of Asia Pacific, etc.
- (h) I was appointed as **House Tutor** at Muktijodha Ziaur Rahman Hall from *Jan 2005 to Aug 2007*. and **Assistant House Tutor** at the same Hall from *Oct 2003 to Jan 2005*.
- (i) **Part-time faculty:** within University of Dhaka at different different such as EEE, Nuclear Engineering, Oceanography and at ISRT.
- (j) worked as **Teaching Assistant, Student Volunteer** and **Maths Project Helper** in the School of Mathematics, The University of Manchester, UK from *Sep 2008 to Sep 2012*.

- (k) worked as **Maths Teacher, (Part time, pay as you go)**, Institute of Independent Colleges & University Teachers (ICUT), UK from Jan 2008 to June 2012: Designed and taught a Practical Statistics module for the Staffs of NHS (National Health Services), Coventry, UK, held on January 21- 23, 2010; In general, helped undergraduate and graduate students of UK's universities with different Mathematics modules.
- (l) Worked as a member (**Kiosk Assistant**) of Manchester United Football Club Hospitality Team, UK on Match day (pay as you go) from Aug 2008 to Aug 2010.

Academic Researches:

- (a) **Ph. D. thesis** (The University of Manchester, UK): Thesis title: *Complete Bayesian Analysis of Some Mixture Time Series Models.*; Year: 2012; Supervisor: Dr. Georgi Boshnakov, School of Mathematics University of Manchester, UK
- (b) **M. S. thesis** (Manchester Business School, UK): Thesis title: *Black-Scholes Model with Past Dependant Returns*; Year: 2018; Supervisor: Prof. Dr. Markus Riedle, Manchester Business School & School of Mathematics University of Manchester, UK
- (c) **M.Sc. thesis** (University of Dhaka, Bangladesh): Thesis title: *A Study of Stability of Solutions of Differential Equations by Liapunov Second Method*; Year: 2001; Supervisor: Prof. Dr. Abdul Matin, Department of Mathematics, University of Dhaka, Dhaka, Bangladesh.

Academic Achievements:

- PhD in Probability and Statistics The University of Manchester Passed
(United Kingdom)
- MSc in Mathematical Finance The University of Manchester Merit, 75% marks on Dissertation
(United Kingdom)
- MSc in Pure Mathematics University of Dhaka First class Third
(Bangladesh)
- BSc(Hons.) in Mathematics University of Dhaka First class First
(Bangladesh)

Academic Scholarships and Awards:

- **2008 ORS & School of Mathematics, University of Manchester Awards**

Overseas Research Scholarship (ORS) is given only one graduate student each year for PhD study based on academic results and research by the EPS faculty of the University of Manchester and paid 80% of the total tuition fee. The rest tuition fee and maintenance was provided by the School of Mathematics, University of Manchester, UK.

- **2007 Commonwealth Scholarship award**

Selected by the University Grant Commission (UGC), Bangladesh under the Commonwealth Scholarship Commission in the United Kingdom for MSc in Mathematics 2007-2008 session.

- **2001 NST Fellowship Award**

This award is given for my MS research work while I was studying MS in Pure Mathematics at University of Dhaka given by National Science and Technology Ministry of Bangladesh.

- **1999 The A.F. Mujibur Rahman Foundation Award**

Annual award includes gold medal, prize money and certificate given by A.F. Mujibur Rahman Foundation to a student of Dhaka University for excellence in mathematics in B.Sc. (Honors) each year.

Research Publications:

1. Sujon Chandra Sutradhar and A B M Shahadat Hossain (July 2021), *A Comparative Study of Pricing Option with Efficient Methods*, GUB Journal of Science and Engineering (ISSN 2409-0476) Vol 7 No 1 (2020).
2. Sadia Anjum Jumana and A B M Shahadat Hossain (March 2021), *Pricing Exotic Options Using Some Lattice Procedures*, GANIT J. Bangladesh Math. Soc. (ISSN 1606-3694, eISSN: 2224-5111) (Accepted).
3. Atoshi Das and A B M Shahadat Hossain (Jan 2021), *A Study on Optimal Multiple Stopping and Swing Options Pricing*, GANIT J. Bangladesh Math. Soc. (ISSN 1606-3694, eISSN: 2224-5111) (Accepted & published online).
4. S. M. Arif Hossen and A B M Shahadat Hossain (Jan 2021), *A Comparative Analysis of Monte Carlo and Quasi-Monte Carlo Methods in Financial Derivative Pricing*, Dhaka Univ. J. Sci. 69(1): 1-6, 2021 (January).
5. Tahmid Tamrin Suki, Farzana Afroz and A B M Shahadat Hossain (Nov. – Dec. 2020), *A Numerical Investigation in Option Valuation*. IOSR Journal of Mathematics (IOSR-JM), e-ISSN: 2278-5728, p-ISSN: 2319-765X. Volume 16, Issue 6 Ser. III, PP 34-41.
6. Tanmoy Kumar Debnath and A B M Shahadat Hossain (20 Jul 2020), *A Comparative Study between Implicit and Crank-Nicolson Finite Difference Method for Option Pricing*, GANIT J. Bangladesh Math. Soc. (ISSN 1606-3694) Vol 40 No 1, pp.13-27 .
7. Md. Shorif Hossan , A B M Shahadat Hossain and Md. Shafiqul Islam (25 Feb 2020) , *Numerical Solutions of Black-Scholes Model by Du Fort-Frankel FDM and Galerkin WRM*, IJMR(International Journal of Mathematical Research), ISSN(e): 2306-2223 ISSN(p): 2311-7427, Vol. 9, No. 1 ,pp. 1-10.
8. Tahmid Tamrin Suki and A B M Shahadat Hossain (30 Dec 2019), *A Comparative Analysis of the Black-Scholes-Merton Model and the Heston Stochastic Volatility Model*. GANIT J. Bangladesh Math. Soc. (ISSN 1606-3694) Vol. 39 pp.127-140.

9. A B M Shahadat Hossain and Farzana Afroz (20 July 2019), *A comparative Study of The Black-Scholes Model and a Modified Black-Scholes Model with Bounded Underlying Prices for Option Valuation*, The International Journal of Social Sciences (TIJOSS) (ISSN 2305-4557), Vol.76 No. 1, pp 73-85.
10. A B M Shahadat Hossain, Maliha Tasmiah Noushin and Kamrul Hasan (July 2019), *A Comparison of the Black-Scholes Option Pricing Model and Its Alternatives*, Dhaka Univ. J. Sci. 67(2): 105- 110.
11. Sharif Mozumder, ABM Shahadat Hossain, Sadia Tasnim, Arafatur Rahman (2015). *Numerical Schemes and Monte Carlo Method for Black and Scholes Partial Differential Equation: A Comparative Note*, Universal Journal of Computational Mathematics 3(4): 50-55, 2015.
12. A. B. M. Shahadat Hossain, Rehana Bari and Sharif Mozumder (2015). *A Numerical Study of an Application of the Multi-parameter Local Bifurcation Theory*, International Journal of Sciences & Applied Research(IJSAR), 2(5), 2015; 30-34 (ISSN 2394 - 2401 (online), ISSN 2394 - 384X (print)).
13. A. B. M. Shahadat Hossain and Mozumder Sharif (2013). *On Determinants and Sensitivities of Option Prices in Delayed Black-Scholes Model*, The International Journal of Social Sciences (TIJOSS), pp 037-045 Vol 011. No. 1 – 2013.
14. A. B. M. Shahadat Hossain, Sharaban Thohura and Salina Aktar (2009). *The Lotka-Volterra Model: An Approach by the CAS*. Ganit, the Journal of Mathematical Society(ISSN 1606-3694), Vol. 29, 2009, pp. 87-98, Dhaka, Bangladesh.
15. Rehana Bari, A. B. M. Shahadat Hossain, Md. Jakir Hossen and Md. Moshior Rahman (2007). *Multi-parameter Bifurcation and Stability of Solutions at a Multiple Eigenvalue*, The Dhaka University Journal of Science, Vol. 26, 2006, pp. 71-83, Dhaka, Bangladesh.
16. A. B. M. Shahadat Hossain, Rifat Ara Rouf and A F M Khodadad Khan(2006). *Two Species Competition in a Chemostat for a Growth Limiting Substrate*. Ganit, The Journal of Mathematical Society(ISSN 1606-3694),Vol. 26, 2006, pp. 71-83, Dhaka, Bangladesh.
17. A. B. M. Shahadat Hossain and Chandranath Podder(2006). *Stability of a Chemostat Model of Two Microorganisms*, BRAC University Journal Vol. III, No. 1, 2006, pp. 53-58, Dhaka, Bangladesh.
18. A. B. M. Shahadat Hossain (2005). *Two Species Competition in a Chemostat: An Approach by CAS*. Ganit, The Journal of Mathematical Society(ISSN 1606-3694), Vol. 25 (SILVER JUBILEE VOLUME), 2005, pp. 43-57, Dhaka, Bangladesh.

Ph.D. Research Supervisions:

1. **Afroza AKter** (Assistant Professor of Mathematics, BUET, on progress.)

Thesis Titled: "A Comprehensive Study of Numerical Methods for Different Options Valuations."

M.S. Research Supervisions:

1. **Sujon Chandra Sutradhar** (M.S. in Applied Mathematics, Session: 2018-2019, on progress.)
Thesis Titled: "*A Comprehensive Study of Real Option Valuation.*"
2. **Susoma Paul** (M.S. in Applied Mathematics, Session: 2017-2018.)
Thesis Titled: "*A Comprehensive Study of Currency Option Pricing with Uncertain Exchange Rate and Stochastic Interest Rates.*"
3. **Md. Abul Heyath Sajib** (M.S. in Applied Mathematics, Session: 2017-2018.)
Thesis Titled: "*A Comprehensive Study of Finite Volume Methods for Option Valuation.*"
4. **Atoshi Das** (M.S. in Applied Mathematics, Session: 2017-2018.)
Thesis Titled: "*A A Comprehensive Study on Optimal Multiple Stopping and Swing Options Pricing.*"
5. **Farzana Afroz** (M.S. in Applied Mathematics, Session: 2016-2017.)
Thesis Titled: "*A Comparison of Black-Scholes Option Pricing Model and Its Alternatives.*"
6. **Tahmid Tamrin Suki** (M.S. in Applied Mathematics, Session: 2016-2017.)
Thesis Titled: "*A Comparison of Black-Scholes Option Pricing Model and Its Alternatives.*"
7. **S. M. Arif Hossen** (M.S. in Applied Mathematics, Session: 2016-2017.)
Thesis Titled: "*A Comparison of Black-Scholes Option Pricing Model and Its Alternatives.*"
8. **Md. Shorif Hossain** (M.S. in Applied Mathematics, Session: 2016-2017.)
Thesis Titled: "*A Comparative Analysis of Monte Carlo and Quasi-Monte Carlo Methods in Financial Derivative Pricing.*"
9. **Kamrul Hassan** (M.S. in Applied Mathematics, Session: 2014-2015.)
Thesis Titled: "*A Comparison of Black-Scholes Option Pricing Model and Its Alternatives.*"
10. **Tanmoy Kumar Debnath** (M.S. in Applied Mathematics, Session: 2014-2015.)
Thesis Titled: "*A Comparative Analysis of Some Numerical Techniques of Option Pricing.*"

Fourth Year B.S. (Honors) Project Supervisions:

The following projects (FOURTH YEAR HONS. PROJECT) have been successfully completed under my supervision:

Title of the Project	Students Name & Roll	Session
<i>Option Valuation Using Some Lattice Procedures</i>	Sadia Anjum Jumana (SK-02) Nusrat Tamanna Mim (SN-15) Gias Uddin(AE-)	2018-2019
<i>A Comprehensive study of Binomial methods for valuing options with CAS</i>	Sujon Chandra Sutradhar (Jn-06-24) Md. Mehedi Hassan Rana (FH-17) Debwashis Borman(JN-38)	2017-2018
<i>A Short Note on Mathematical Finance</i>	Tahmid Tamrin Suki (SK-24) Deepanwita Chakraborty (RK-110) Fauzia Haque (SN-204) Nusrat Jahan(SN-439)	2015-2016
<i>Some Applications of Complex Analysis using CAS</i>	Arifur Rahman (EK-111) Zulfiqur Hairder (SH-76) Md. Ibrahim Khalil (SH-157)	2014-2015
<i>A Brief Study of Black Scholes Model: an Approach by CAS</i>	Arunav Rahman Joy (SH-05) Rajat Mazumder (JN-158) Lipi Akhter (RK-156) Arifin Rahman (EK-209) Parisa Parvin (RK-29)	2013-2014
<i>Computer Aided Chemostat Model</i>	Ghulam Murtaza Talukder (FH-206) Mahabubur Rahman Khan (FH-211) Zafar Mahmud	2004 -2005

Editorial/Reviewing of International/National Research Journals:

1. Dhaka University Journal of Applied Science and Engineering (DUJASE)
2. Ganit: J. Bangladesh Mathematical Society
3. GUB Journal of Science and Engineering (GUBJSE)
4. Journal of Bangladesh Academy of Sciences(JBAC)

Book:

1. Learn \LaTeX in 12 Hours—An Example Based Approach, *CMDA* Publication, 2020.
2. Introduction to Financial Mathematics, (ongoing)
3. Applied Stochastic Calculus, (ongoing)

4. Applied Stochastic Modeling in Finance, (ongoing)

Computer Skill:

- (a) Use of Packages: Derive, Math lab, \LaTeX , Maple, M S Word, etc
- (b) Language: Fortran, Mathematica, Python etc.

Conferences and Seminar Presentations:

1. **National Workshop on Applications of Mathematics in Different Fields.** *Dec 20, 2019*
 Khulna University of Engineering and Technology (KUET)
 Topic: *Presented a talk as Resource Person on Mathematics in Finance.*
2. **Seminar on Modeling and Simulation, Department of Applied Mathematics,** *Sep 26, 2018*
 University of Dhaka, Bangladesh.
 Topic: *Mathematical Modeling in Finance.*
3. **Probability and Statistics Group Seminar, School of Mathematics,** *Nov 16, 2012*
 The University of Manchester
 Topic: *Complete Bayesian Analysis of Some Mixture Time Series Models.*
4. **Mathematical Finance Group Seminar, School of Mathematics,** *Mar 9, 2009*
 The University of Manchester
 Topic: *An Affine Stochastic Functional Differential Equation Model of An Inefficient Financial Market.*
5. **Manchester Research Student Conference (MRSC),** *Feb 27, 2009*
 The University of Manchester
 Topic: *Black-Scholes Model with Past Dependant Returns.*
6. **Numerical Algorithm Group (NAG) conference** *Nov 15, 2008*
 The University of Manchester
 Topic: *Comparison between Black-Scholes Model and Delay Black-Scholes Model.*
7. **International Workshop on Wavelets & The Theory of Quantum Finance** *Jan 31, 2006*
 The Millennium University, Dhaka, Bangladesh
 Topic: *Stability of a Chemostat Model of Two Microorganisms.*
8. **Workshop on Mathematical Finance** *Summer, 2009*
 School of Mathematics, The University of Manchester, UK
9. **14th Mathematical Conference** *December, 2003*
 University of Dhaka, Bangladesh
10. **6th Applied Mathematics Conference** *Spring, 2002*
 University of Sylhet, Bangladesh

Membership of Professional Societies:

- (a) Life member of the Alumni Association of Uk Universities in Bangladesh.
- (b) Life member of Registrar Graduate of Dhaka University.
- (c) Life member of Bangladesh Mathematical Society.
- (d) Life member of the Alumni Association of The University of Manchester.
- (e) Executive committee member of Dhaka University of Alumni Association from 2003 - 2004.
- (f) Treasurer, Bangladesh Mathematical Society from 2010 - 2013.
- (g) Executive committee member of Dhaka University Teacher's Club from 2017 - 2018.
- (i) Director, Institutional Quality Assurance Cell (IQAC), SA Entity, Department of Applied Mathematics, University of Dhaka, Dhaka – 1000, since 2020.

Organizing of Scientific Meetings/Workshops:

- (a) Member, 20th International Mathematics Conference of BMS, Department of Mathematics, University of Dhaka, 08 - 10 December, 2017.
- (b) Member, National Mathematics Conference organized by A F Mujibur Rahman Foundation & Bangladesh Mathematical Society, Department of Mathematics, DU, 28- 29 December, 2018.

References:

- | | |
|--|---|
| <p>1. Dr. Georgi Boshnakov
School of Mathematics
The University of Manchester
Oxford Road, M13 9PL Manchester, UK
E-mail:georgi.boshnakov@manchester.ac.uk</p> | <p>2. Prof. Dr. Munibur Rahman Chowdhury
Department of Mathematics
University of Dhaka
Dhaka-1000, Bangladesh
E-mail:mrc@member.ams.org</p> |
| <p>3. Prof. Dr. Md. Showkat Ali
Department of Applied Mathematics
University of Dhaka
Dhaka-1000, Bangladesh
E-mail:msa@du.ac.bd</p> | <p>4. Prof. Dr. Md. Shahidul Islam
Department of Mathematics
University of Dhaka
Dhaka-1000, Bangladesh
E-mail:mshahid@du.ac.bd</p> |

(Dr. A B M Shahadat Hossain)

Appendix – I

Teaching Philosophy

Teaching mathematics is a challenging job that brings me a lot of joy. I am fascinated by this subject, which is readily apparent in my teaching. I try to use every possibility to expose students to the exciting world of mathematics, often implicitly, so they may not even notice it at first. My main goal is to help students to become independent mathematical thinkers, capable of approaching, framing, and solving problems on their own. I think that students participation is crucial for learning mathematics. That is why one of my first sentences in all my classes is: *“Interrupt me at any time, and stop me to ask questions if something smells funny ...”*.

I prepare my classes thoroughly, but I like to improvise whenever possible. I open each session with a brief reminder of the previous session’s material and an outline of the day’s topic, and I typically conclude with a summary of key points. There is a special session for review before every major test. I usually speak clearly, loudly, and slowly, but enthusiastically. When possible, I distribute solutions to problems, quizzes, and tests. To reduce students’ anxiety about tests, I make old exam papers available to them, and often give practice tests. Coursework are naturally integrated into my courses.

I believe that a teacher has a greater role of inspiring and recognizing the potential in each student. During my over **17 (seventeen) years** of maths teaching career, I taught a lot of different courses to students with a broad range of needs, knowledge, and cultural backgrounds. Several important general principles that I try to use in my teaching practice can be formulated as follows:

- (1) *No matter how experienced a teacher is, every new class and every new student pose a challenge. For excellence in teaching, there is always room for improvement.*
- (2) *A teacher has to appeal to different learning styles, to offer a variety of instructional experiences, and to keep an open mind to new teaching techniques to give every student the opportunity to participate fully and actively in the learning process.*
- (3) *Being a successful teacher depends on creating a learning environment with the open exploration of ideas, a relationship in which students feel respected as well as challenged. Students should be encouraged to stretch themselves a bit beyond their level of comfort and be given an opportunity to leave every class feeling that they have overcome a new challenge successfully.*

These thoughts guide my teaching practices and ultimately shape what kind of teacher I strive to be.

Appendix – II

Important courses studied and successfully completed

@University of Manchester (PhD in Probability and Statistics, Sep 2008 – Sep 2010)

Course Code	Course Title
MATH 41002	Linear Analysis
MATH 68001	Statistical Inference
MATH 68032	Time Series Analysis and Forecasting in Finance
MATH 68122	Markov Chain Monte Carlo
MATH 68091	Statistical Computing

@University of Manchester (MSc Mathematical Finance, Sep 2007 – Sep 2008)

Module Code	Module Title
BMAN 70141	Derivative Securities
BMAN 70381	Foundation of Finance Theory
MATH 60301	Martingale with Application in Finance
MATH 61711	Stochastic Calculus
MATH 60302	Brownian Motion
BMAN 71122	Financial Econometrics
MATH 60082	Stochastic Modelling in Finance
MATH 60082	Computational Finance
MATH 62733	Dissertation – MSc Mathematical Finance

@University of Dhaka (MSc in Pure Mathematics, 1999 – 2000)

Course Code	Course Title
MFP 101	Real Function Theory
MFP 106	General Topology
MFP 108	Differential and Integral Equations
MFP 110	Advanced Computing & Numerical Analysis
M.Sc. Thesis	MSc Pure Mathematics

Appendix – III

Courses Coordinated & Taught

@Department of Applied Mathematics, University of Dhaka, Dhaka 1000, Bangladesh :: July 2014 – Present

I involved in teaching both undergraduate and postgraduate levels. In addition, I supervised students Project works at B.Sc. level & Thesis work at M.S. level.

- AMT 507: Stochastic Modelling in Finance (*at present*)
- AMTH 407: Stochastic Calculus (*at present*)
- AMTH 308: Introduction to Financial Mathematics (*at present*)
- AMTH 102: Applied Calculus
- AMTH 104: Applied Linear Algebra
- AMTH 450: Math Lab

@Manchester Metropolitan University, Manchester, UK :: Jan 2012 – Apr 2012

- Foundation level Mathematics and Statistics (Spring 2012)

@School of Mathematics, The University of Manchester, Manchester, UK :: Sep 2008 – Dec 2012

I have taken tutorial classes of the following courses:

- MATH38032/MATH48032/MATH68032 Time Series Analysis; *Lecturer:* Dr. G. Boshnakov.
- MATH20812 Practical Statistics 1; *Lecturer:* Dr. G. Boshnakov.
- MATH47101/MATH67101 Stochastic Calculus; *Lecturer:* Dr. G. Peskir.
- MATH20951 Financial Mathematics for Actuarial Mathematics 2; *Lecturer:* Dr. Markus Ridle.
- MATH10141 Probability I; *Lecturer:* Dr. J. Morarity
- MATH10282 Introduction to Statistics; *Lecturer:* DR. P. Foster
- MATH19861 Mathematics 0N1; *Lecturer:* DR. CDC Steele.
- MATH19842 Mathematics 0F2 – Vectors and Statistics; *Lecturer:* DR. CDC Steele, Dr JH Bagley, Mr MK Tso.
- MATH19872 Mathematics 0D2 – Vectors and Statistics. *Lecturer:* DR. CDC Steele.
- MATH19821 Mathematics 0C1; *Lecturer:* DR. CDC Steele, Prof JB Paris

@Department of Mathematics, University of Dhaka, Dhaka 1000, Bangladesh :: Apl 2003 – 2014

I involved in teaching both undergraduate and postgraduate levels. In addition, I supervised students Project works at B.Sc. level.

- MTH 101: Fundamental of Mathematics.
- MTM 102: Calculus I(2007).

- MTM 104: Linear Algebra (2003- present).
- MTH 105: Introduction to Computers & Fortran Ptogramming.
- MTM 204: Numerical Analysis.
- MTH 301: Real Analysis-II.
- MTH 302: Complex Analysis.
- MTH 310: Partial Differential Equations.
- MTH 350: Math Lab (Mathematica).
- MTH 450: Math Lab (Fortran).

@Department of Electrical and Electronic Engineering (EEE) , University of Dhaka, Dhaka -1000, Bangladesh :: January 2018 – Present

- MAT 1103: Linear Algebra and Numerical Analysis
- MAT 1201: Vector Calculus and Complex Analysis

@Department of Nuclear Engineering (NE) , University of Dhaka, Dhaka -1000, Bangladesh :: January 2018 – Present

- NE 3107: Complex Variables, Laplace and Fourier Transformations

@Department of Oceanography (OCN) , University of Dhaka, Dhaka -1000, Bangladesh :: January 2019 – Present

- OCN 312: Marine Ecological and Ecosystem Modeling

@Institute of Statistical Research and Training(ISRT), University of Dhaka, Dhaka -1000, Bangladesh :: Feb 2003 – Sep 2007

- ASTH 307: Mathematical Analysis (2005, 2006, 2007).
- ASTH 209: Mathematical Methods (2005)

@School of Communication, Independent University, Bangladesh (IUB), Dhaka 1212, Bangladesh :: Aug 2001 – Apl 2003; Aug 2013 – May 2016

- MAT 099: Remedial Mathematics
- MAT 101: Basic Mathematics
- MAT 201: Calculus
- MAT 203: Linear Algebra - Vector and Matrices
- MAT 211: Probability and Statistics

@Department of Science and Humanities, Military Institute of Science and Technology(MIST), Mirpur Cantonment, Dhaka, Bangladesh :: 05 July 2015 – 24 Dec 2015

- Math 139: Differential Equation and Statistics.

@Department of Business Administration in Finance & Banking, Bangladesh University of Professionals (BUP), Bangladesh :: July – December 2016

- ALD1203: Business Mathematics

@Department of Mathematics & Physics, North South University (NSU), Dhaka 1212, Bangladesh :: May 2013 – December 2016

- MAT 116: Precalculus
- MAT 120: Calculus and Analytic Geometry-I
- MAT 125: Linear Algebra