

Department of Basic Sciences and Humanities



Vision

The vision of the Department is to produce socially, scientifically and humanely well-equipped competent professionals who shall be morally upright, ethically strong and academically excellent for a holistic approach to socio-cultural, economic and technological development of society at large.

Mission

The current courses of the Department of Basic Sciences and Humanities in Mathematics, Physics, History and Sociology are designed to offer students rigorous and comprehensive academic exercise on fundamental aspects of natural and social sciences which are necessary to turn them into knowledgeable professionals. The Department undertakes efforts to make the

offered courses more effective in teaching and learning.

Department Faculty and Facilities

The Department has fourteen full time faculty members, two of whom have Ph.D. degrees, three have M.Phil, five have Master degrees and four are on leave for higher education. The Department has a number of part-time faculty members from well-reputed public universities.

The Department's greatest resource is the Physics laboratory. The Department has always given emphasis to develop its laboratory facilities on priority basis to make it self-sufficient and rich in instruments. This full-fledged lab serves the whole UAP students to perform various scientific experiments on physics using modern equipment efficiently.



Students working in Physics laboratory

The Department of Basic Sciences and Humanities is run by a team of dedicated, committed and qualified faculty members and staff who not only teach and prepare students for their educational attainments but also bring together various co-curricular activities for their overall development.

The faculty members are always well prepared in taking classes and delivering lectures. They are easy to approach and friendly so that the students can come and discuss their academic problems as well as different issues during and after class hours. As the faculty members cover all the departments of the University, they have the privilege to interact with all the students and work with the university as a whole.

The Department, like others, initiated quality assurance protocols from July 2015 to achieve outcome-based education by ensuring the attainment of program outcomes and course learning outcomes through assessment at student level. The faculty members participated in several training events and discussions about the quality assurance protocols to make the program a complete success.

In order to have competent and knowledgeable academic intellectuals the department encourages its faculty members to pursue higher education both at home and abroad. So far four faculty members are on study leave for their Ph.D. degree. Recently, Ms. Shirin Provat, Lecturer in Mathematics has begun her studies in the USA towards attaining Ph.D.

Achievements of the Department

As mentioned earlier, the Department has its reach over all the Departments of UAP; it teaches the students of all the departments of the university.

A total of 1,448 students in Fall 2018 and 1,373 students in Spring 2019 from 8 different departments took the Mathematics course offered by the Department. The Department offered the Physics course to 749 and 815 students during Fall 2018 and Spring 2019 semester, respectively. Similarly, course on Sociology was offered to 610 and 617 students whereas courses related to History were taken by 665 and 661 students in Fall 2018 and Spring 2019 semester, respectively.

Department Events and Co-curricular Activities

The faculty members help and guide the students to get them involved in co-curricular activities that in turn help them build well-rounded personality and intellectual ability. Study tours, field trips and seminars are part of the regular academic events to develop practical experience and professional expertise along with academic excellence.

The faculty members remain engaged in different clubs of UAP to help conduct regular cultural programs, sports and competitions for the students. The following are some such remarkable events and programs of Fall 2018 and Spring 2019 semesters.

Participation in Star Melodies - Kotha O Surer Omor Juti

In order to celebrate the 20th century lyricists and composers and to highlight on the songs that were born from their beautiful blend of talents, *The Daily Star* initiated a program called, Star Melodies - Kotha O Surer Omor Juti. Mr Mahfuz

Anam, Editor and Publisher of *The Daily Star* hosted the musical soiree on 27th November 2018. He greeted the houseful audience with a welcome speech. Performers from UAP were invited by *The Daily Star* to participate in this auspicious program. Ms. Layeqa Bashir, Assistant Professor of Sociology, with two students of UAP were privileged enough to take part in the program along with some of the expert artistes of the country.



Performers in a musical program — Kotha O Surer Omor Joti.

Performance at Chhayanaaut's Celebration of the 47th Victory Day

In response to an invitation of Chhayanaaut's celebration of the 47th Victory Day, UAP students, trained by Ms. Layeqa Bashir, Assistant Professor of Sociology, and Adviser of the UAP Cultural Club, performed in a cultural program, *Hajaro Konthe Deshgaan* along with the performers of *Chhayanaaut* held at the University of Dhaka on 16 December 2018.



Students at *Hajaro Konthe Deshgaan* to Mark the Victory Day 2018.

UAP Participation in Inter University Math Olympiad

The 6th East West University Inter University Math Olympiad was held on 23 March 2019 at East West University. Twenty one universities participated in the Olympiad. A team of seven students from UAP competed in the contest. Ms. Maisha Islam Sejunti, Lecturer in Mathematics gave necessary mentorship to the team.



Participants at East West University Inter University Math Olympiad 2019.

Study Tour to National Museum

The Department organized a study tour to the National Museum for the 1st semester students on 19 January 2019 in association with the of History and Heritage Club. Mr. A. S. M. Mohsin, Assistant Professor of History and Adviser to the club accompanied the students. This tour was important for them to increase their knowledge about the history of political events that led to the emergence of Bangladesh.



UAP Students at the National Museum

Exhibition in Memory of the Language Martyrs

The History and Heritage Club of the Department of Basic Sciences and Humanities, jointly with Shaheed Barkat Museum, Dhaka University, organized a day long exhibition in memory of the Language Martyrs on 01 August 2018 at the UAP Plaza. The Club also organized a special lecture on the same day on "Bangladesh: From Language Movement to Independence". Dr Abu Md. Delwar Hossain, Professor, Department of History and Dean of the Faculty of Arts, University of Dhaka was the key note speaker on the subject. He conveyed a strong message to the students that no nation in the world can achieve independence in a single day. Faculty members and students from different departments showed keen interest in the program and attended the lecture.



Exhibition at UAP in memory of the Language Martyrs.

Lecture on Role of Sufis

The Department of Basic Sciences and Humanities and UAP History and Heritage Club, jointly organized a special lecture on 22 November 2018 on "Transformation of the Society in Medieval Bengal: Role of the Sufis". Mr Sayed Abu Touab Shakir, Associate Professor, Department of History, Jahangirnagar University was the keynote speaker. He showed how Sufis played a vital role in spreading Islam in Bengal. Because of their liberal ideologies a large number of people converted into Islam in Bengal delta and Islam developed as a moderate religion. Faculty members and students from different departments were present at the lecture.



Mr Sayed Abu Touab Shakir speaking on "Transformation of the Society in Medieval Bengal: Role of the Sufis"

Intra-university Cultural Competition

The UAP Cultural Club organized the intra-university cultural competition, 2018. The competition was held in two rounds. The selected short listed participants from the first round were sent to the final competition. The final round events took place at the UAP Auditorium on 9 December 2018. Ms. Layeqa Bashir, Adviser of the Cultural Club judged the performances and selected champions and runners up from each of the eight categories --four categories of songs, dance, and recitation, instrumental music and anchoring. The program was planned and arranged with guidance from the Cultural Club Advisor.



BOT Chairman, Monzoor Ahmed Chowdhury handing over the prizes to the winners

Celebration of Pohela Boishakh 1426

UAP celebrated *Pohela Boishakh* 1426 on 14 April 2019. The program was organized by the UAP Cultural Club. The day long program started with a colourful *Mangal Shobhajatra*. This colourful rally was followed by a cultural stage show where the students performed songs, dances, recitations, and drama. A colourful *Boishakhi Mela*, was arranged at the East Plaza where the students displayed and sold a variety of Bengali traditional products. Both the cultural show and the *Boishakhi Mela* were inaugurated by the Vice Chancellor and the Chairman of the Board of Trustees of UAP. Layeqa Bashir, Assistant Professor of Sociology acted as the Convener of the whole program.



Welcoming Bangla New Year 1426 with Mangal Shobhajatra



Celebrating the first day of Bangla New Year 1426

Through these events and programs, the Department of Basic Sciences and Humanities contribute to students to achieve academic excellence, realize latent potential and talents as well as acquire social skills for happy personal and professional life.

Faculty Members

Dr Md. Sultan Mahmud

Professor & Head
Ph.D., KUET, Bangladesh

Dr Sanjit Kumar Paul

Professor
Ph.D., Jahangirnagar University, Bangladesh

Ms. Tahmina Akhter

Assistant Professor
M.Phil., BUET

Ms. Layeqa Bashir

Assistant Professor
M.S.S., University of Dhaka, Bangladesh

Mr. Md. Anisur Rahman

Assistant Professor
M.Phil. BUET.

Mr. Md. Rashidul Hasan

Assistant Professor
M.S., University of Nevada, USA

Mr. Md. Nahian Chowdhury

Assistant Professor
M.S., Shahjalal University of Science and Technology, Bangladesh

Mr. A. S. M. Mohsin

Assistant Professor
M.Phil., University of Dhaka, Bangladesh

Ms. Kaniz Fatema Nipa

Lecturer
M.S., University of Dhaka, Bangladesh

Ms. Samsun Nahar

Lecturer
M.Phil., BUET

Ms. Shirin Provat

Lecturer
M.S., University of Dhaka, Bangladesh

Ms. Shahina Naznin

Lecturer
M.S., University of Dhaka, Bangladesh

Ms. Maisha Islam Sejunti

Lecturer
M.S., University of Dhaka, Bangladesh

Ms. Sk. Reza-E-Rabbi

Lecturer

M.S., Khulna University, Bangladesh

Awards Received by Faculty Members

Ms. Shirin Provat, Lecturer in Mathematics, now on study leave, is doing Ph.D. in Computational Mathematics at Florida State University, USA with a full-funded scholarship received in August 2018.

Mr. Sk. Reza-E-Rabbi, Lecturer in Mathematics, has received "National Science and Technology (NST) Fellowship-2018" from Ministry of Science and Technology, Government of Bangladesh, for his M.Sc. thesis work on "Unsteady MHD Flow of a Chemically Reacting Casson Fluid Past a Stretching Sheet with Brownian Motion and Thermophoresis Effects".

Faculty Leadership

Ms. Layeqa Bashir, Assistant Professor of Sociology

Member, Executive Body, *Chhayanaut Sangeet-Vidyayatan*, from 14 April 2017 to date.

Mr. Md. Rashidul Hasan, Assistant Professor of Mathematics (on leave),

Elected President, Bangladesh Student Association at University of New Mexico, USA in April 2019.

Department Goals for the Next Year

The Department plans to organize UAP Inter-Department as well as Inter-University Mathematics Olympiad in preparation to holding National Undergraduate Mathematics Olympiad at UAP.

Publications of Faculty Members**Peer-reviewed Journal Papers**

Mahmud, M. S. (2019). Variation of Magnetization $M(0)$ and Curie Temperature T_c with Cr

Concentration for the $Fe_{73.5-x}Cr_xCu_1Nb_3Si_{13.5}B_9$ with $x = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12.5, 15$ & 17.5 Alloys. *International Journal of Materials Science*, 14(1), 11-15.

Mahmud, M. S. (2018). Determination of Curie Temperature of Cr-substituted Fe based amorphous $Fe_{73.5-x}Cr_xCu_1Nb_3Si_{13.5}B_9$ ($x=10, 12.5, 15$ & 17.5) Alloys Using the ABK (Arrot-Belov-Kouvel) plot Method. *International Journal of Advanced Materials Science*, 9(1), 1-6.

Mamun, A. A., Arifuzzaman, S.M., **Reza-E-Rabbi**, S., Biswas, P. & Khan, M. S., (2018). Numerical Investigation of Boundary-layer Flow of Sisko Nanofluids Through a Nonlinear Stretching Sheet with MHD and Thermal Radiation Effects. *International Journal of Heat and Technology*, 37 (1), 285-295.

Nahar, S., Akther, S. & Alim, M. A. (2018). Statistical Averaging Method and New Statistical Averaging Method for Solving Extreme Point Multi-Objective Linear Programming Problem, *Mathematics Letters*, 4(3), 44-50.

Paul, S. K. (2018). Higher(U,M)-Derivatives in Completely Semi Prime-Rings. *Journal of Pure and Applied Science and Technology*, 8(2), 1-8.

Paul, S. K. (2018). MHD free convection heat and mass transfer flow over a vertical porous plate in a rotating system with hall current heat source. *International Journal of Advance in Applied Mathematics and Mechanics*, 6(1), 49-64.

Sarkar, T., Arifuzzaman, S.M., **Reza-E-Rabbi**, Sk., Khan, M.S., Ahmed, R. & Ahmmmed, S. F., (2018). Unsteady Magnetohydrodynamic Casson Nanofluid Flow Through a Moving Cylinder with Brownian and Thermophoresis Effects. *Annales de Chimie: Science Des Materiaux*, 42(2), 181-207.