

Department of Accounting & Information Systems Faculty of Business Studies University of Dhaka

# BBA PROGRAM 28<sup>th</sup> Batch (Session 2021-2022) Onward



# **Mailing Address**

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# UNIVERSITY OF DHAKA Department of Accounting Established: 1970

# CHAIRMAN

Prof. Dr. M. Habibullah Prof. A.H.M. Habibur Rahman Prof. Dr. M. Habibullah Prof. A.B.M. Khalid Prof. Md. Muinuddin Khan Prof. Santi Narayan Ghosh Prof. Dr. Md. Yousuf Talukdar Prof. Dr. Md. Yousuf Talukdar Prof. Md. Muinuddin Khan Prof. Mahbub Ahmed Prof. Dr. Saroj Kumar Saha Prof. Dr. Abul Hashem Prof. Dr. Abul Hashem Prof. Dr. Abul Hashem Prof. Dr. M. Harunur Rashid Prof. Dr. Syed Masud Husain 09.10.1970-30.06.1973 01.07.1973-31.07.1973 01.08.1973-31.07.1976 01.08.1976-31.07.1979 01.08.1979-31.07.1982 01.08.1982-31.07.1985 01.08.1985-31.07.1988 01.08.1988-17.04.1992 18.04.1992-17.04.1995 18.04.1995-17.04.1998 18.04.1998-26.08.1998 27.08.1998-13.02.1999 14.02.1999-31.10.1999 01.11.1999-31.10.2002 01.11.2002-23.11.2002

# Department of Accounting & Information Systems Renamed in 2002

#### CHAIRMAN

Prof. Dr. Syed Masud Husain	24.11.2002-31.10.2005
Prof. A. S. M. Abdullah	01.11.2005-27.04.2006
Prof. Jagadish Chandra Sukla Das	29.04.2006-28.04.2009
Prof. Begum Khaleda Khanam	29.04.2009-28.04.2012
Prof. Mamtaz Uddin Ahmed	29.04.2012-28.04.2015
Prof. Abdul Hakim	29.04.2015-28.04.2018
Prof. Dr. Riazur Rahman Chowdhury	29.04.2018-28.04.2021
Prof. Dr. Mohammad Abdul Moyeen (Additional charge)	29.04.2021-29.05.2021
Prof. Dr. Tahmina Khatun	30.05.2021-01.01.2022
Prof. Dr. Dhiman Kumar Chowdhury	02.01.2022-Till Now

# **Department of Accounting & Information Systems**

The University of Dhaka, established in 1921, is the country's premier university of higher education. Fully autonomous, it is an accredited, non-profit institution operating year-round and providing undergraduate, graduate, and postgraduate education for meritorious students from all corners of Bangladesh and abroad.

The university has approximately 1,992 faculty members and 37,018 students enrolled in 83 departments under 13 faculties and 13 institutes. Over the years, the university has built up a reputation for commendable academic excellence and contributed uniquely to the socioeconomic, political, and cultural development of the region. The Department of Accounting & Information Systems is one of the major departments under the Faculty of Business Studies of the University of Dhaka.

Commerce was introduced as a separate area of discipline under the Faculty of Arts in the 1922-23 academic sessions. In 1970, the Faculty of Commerce was established elevating the Department of Commerce. Initially, the Faculty of Commerce started functioning with two departments—Accounting and Management. Later, two other departments, namely Finance and Marketing were set up to prepare the students with specialized knowledge for positions in government, business and academia.

The Department of Accounting started its academic activities with 8 teachers and 140 students in 1970 and has currently over 1,500 students and 50 (including part-time) teaching staff in present time with the department upholding its unwavering commitment to first-rate teaching quality and teaching staff. Keeping in view the changes in the structure and curricula of the department, it was renamed the *Department of Accounting & Information Systems* on November 24, 2002. The department offers undergraduate, graduate, and postgraduate programs in Accounting with a clear philosophy to develop in students the required knowledge and understanding of theoretical concepts and practical techniques for the accounting profession and managerial discipline. The department offers a PhD program to suitable candidates under the supervision of a number of distinguished faculty members who are internationally acclaimed researchers in their specialized areas.

The Faculty of Commerce was renamed the *Faculty of Business Studies* as per the decision of the Academic Council of the University of Dhaka, which was approved by the National Parliament through an amendment of the Dhaka University Order. The hitherto known Bachelor of Commerce with Honours and Master of Commerce degrees has also been renamed by the Academic Council as Bachelor of Business Administration (BBA) and Master of Business Administration (MBA) in keeping with the trend of greater appeal and acceptability in the job market and subject coverage to successfully face the competitive environment in the modern business world. The BBA of the department is a 126 credit hours program consisting of 40 courses of 3 credits each, viva-voce in 4 years carrying 3 credits and research project carrying 3 credits. This demanded a major change in the course contents and the adoption of 40 courses in place of the conventional 30 courses and a four-year graduation program replacing the traditional 3-year B.Com. (Hons) and 4-year BBA (Hons) programs.

The BBA and MBA programs are to run for four years and one year respectively. The International schooling requirement of 16 years (10+2+4) of regular study for graduation is also met with the new 4-year BBA program (10+2+4).

The degree programs are conducted by a number of highly qualified and foreign trained academic personnel with suitable academic background. Distinguished scholars through their laudable efforts have made the programs the most coveted one. A large number of faculty members – individually and in teams – is actively engaged in research and have already to their credit pioneering research publications. In addition to their commitment to teaching and research, faculty members play an important role in the affairs of the university and the community at large. The diversified academic background of teaching faculty, their research activities, and the dynamic curriculum of Accounting & Information Systems Department have made it one of the leading departments in the University of Dhaka.

#### **BBA PROGRAM IN ACCOUNTING & INFORMATION SYSTEMS**

The BBA in Accounting & Information Systems is a prestigious degree that has been offered by the University of Dhaka since 2000-2001 academic session. It is an internationally recognized qualification for grooming professionals, business executives, entrepreneurs and academics in the relevant area seeking to expand their intellectual horizon and improve their management skills and competence. The program is rigorous, with an emphasis on practicalities and skills for immediate use, which offers students a comprehensive education in all major facets of business.

The University of Dhaka centrally administers admission to the program once in a year under *Business Studies Unit (known as Unit-C)* through MCQ and written tests. The Faculty of Business Studies processes applications for admission in all nine departments under it. Details regarding application and admission procedures, deadline, and eligibility are available from the Dean Office. University website can also be visited for regular updates in this regard. Past statistics show that only one out of about 40 applicants becomes successful in getting admission into the Faculty.

BBA in Accounting & Information Systems is a four-year composite program of 126 credit hours following a semester system of learning, examination and evaluation. The curriculum consists of 40 course units of 100 marks each; and four oral examinations of 25 marks each to be held at the end of each academic year, equivalent to 1 (one) course, i.e., 100 marks, and a Project Paper of 100 marks (equivalent to one course) at the end of fourth year. Thus, the whole program has total marks of 4,200, equivalent to 42 courses of 3 credits each. The courses are spread over eight semesters in four academic years. The duration of each semester is 19 weeks of which 15 weeks are for class teaching and the remaining 4 weeks are for holding the semester final examinations with a break between the semesters. For each course unit, there are two lectures every week each one of which is 1 hour 20 minutes duration and each course unit (including oral examinations and the project paper) is weighted 3 (three) credit hours. Thus, the BBA program is of 126 credit hours. The distribution of marks of each course unit is as follows:

Examination	Marks	Percentage of Marks
Quizzes/Term Paper/Assignments/Class Attendance	10	10%
Mid Term / In-course Examination-1	15	30%
Mid Term / In-course Examination-2	15	30%
Semester Final	60	60%
Total	100	100%

For each lecture course, there are two in-course tests; each test is of one-hour duration carrying 15 marks. The duration of the semester final examination is three hours for each course and the mark allocated is 60. To ensure a very fair evaluation, two independent examiners, one of who

is usually the course teacher, examine all final examination scripts. In case of the difference of more than 20% in any script, a third examiner is appointed for evaluation. The total examination process is administered by a four-member examination committee (including one external member).

Although the examination scripts are evaluated by assigning marks, the results are published by assigning letter grades. With these letter grades a CGPA (Cumulative Grade Point Average) is also published in the result sheer. For each course (i) total of the marks of the semester final examinations plus (ii) total of the marks of the in-course tests and home-assignments as well as the term paper are converted into letter-grades. The rules of the program show the method of calculation concerning the grades earned by the student and the grade point average (GPA) of the semester and/or the year-end. BBA program is monitored by a Program Coordinator, appointed by the Academic Committee of the Department for each batch.

No single method of teaching dominates the program. However, greater emphasis is placed on the lecture method of teaching, which is supplemented by case presentation, group discussion, project work and so on. The scholarly aptitude and sound academic background of teachers and their sincere effort have made the program a highly distinguished one in the university and the most popular one among the students.

Within the framework of these rules and the rules of the university, the departmental Academic Committee may adopt policies for strengthening the academic and other extracurricular activities of the department. The departmental Coordination and Development Committee consisting of one third of the senior teachers work as the brain of this department, continuously in search of improving things including the provision of logistic support, recruitment/promotion of faculty and providing guidelines for overall development of the Department for future.

The department is committed to stay at the top position of formal tertiary level accounting education in Bangladesh. The department will continue to produce highest quality accounting graduates emphasizing on the use of computer-based information systems in practice. The department is committed to update its course curriculum on a regular basis and change teaching methods continuously to keep the rigor and vigour in all of its academic programs. The graduates of this department will be able to match any equivalent academic program of any university in the world. The department never compromises with the quality in teaching and the standards of input to the department. The department will always play an active role in unison with the Faculty of Business Studies and the University of Dhaka to uphold its image and dignity as the highest seat of learning in Bangladesh and the good name that it has earned throughout the world.

#### POST GRADUATE PROGRAMS OF THE DEPARTMENT

### **MBA PROGRAM**

The Master of Business Administration (MBA) with major in Accounting & Information Systems in the Faculty of Business Studies (FBS) is a full-time 48 credit hours professional program. The program is designed to meet the needs of the students who want to develop their career either as executives or entrepreneurs in the field of different business areas as well as teaching and research positions in different institutions. Previously, only 4-year BBA graduates in the Accounting & Information Systems of the University of Dhaka were eligible to get admission into this MBA program. Recently Dhaka University Syndicate has made a decision of allowing the departments to admit students from the outside in vacant positions through an admission test.

#### **EXECUTIVE MBA PROGRAM**

The importance of business education has accelerated at a remarkable speed in the recent decades following the global structural adjustment programs coupled with many significant changes in business environment. Ever growing challenges in the business sector in modern days have made it an utmost necessity for the existing entrepreneurs and executives to update their knowledge and skill with latest developments in techniques and methods of business administration through a formal education to face and manage these challenges. But all these working people are not in a position to avail the regular MBA program of the Department. With this realization of the need for improving the knowledge and skill of business executives, the Department of Accounting & Information Systems has created such opportunities through offering a graduate program leading to the degree of Executive Master in Business Administration (Executive MBA) in the weekends and evening sessions in 2002 when it was named as MBA (Evening) program. This program is 42-66 credit hours (12 to 20 courses of 3 credit hours each) and a 3-month internship program carrying 6 credit hours. The admission test for the program is conducted centrally by the Faculty of Business Studies, University of Dhaka to get into the program. This program is a self-financed and administered by a Program Co-ordination Committee of the Department.

### **MPA PROGRAM**

The department launched the master's program called Master of Professional Accounting (MPA) in 2015. Since then, the objective of the program is to provide good quality professional accountants for the national and international market with advanced level training in accounting. In Bangladesh there is an acute shortage of places to train professionals with good quality masters level accounting education. Having the world class curriculum, excellent evaluation methods and highly trained faculty members, this department has come forward to train executives working in government and private sectors to uphold the image of the accounting profession in Bangladesh and abroad. This program has collaboration with ACCA, UK and students of the program can get exemptions from nine subjects of the ACCA program.

#### MAT PROGRAM

The Master of Accountancy in Taxation (MAT) is a high level, specialized degree program in the Department of Accounting & Information Systems, University of Dhaka to develop tax professionals. The program started its journey in 2017 July- December session. The MAT program prepares the students to be a tax advisor, accountant, financial planner, lawyer, or consultant with a critical and deep understanding of the taxation system of an emerging economy in a global context. The program is designed to meet the growing needs of taxation professionals and practitioners to deal with complex taxation issues involved in business decisions and transactions. It creates a set of relevant and transferrable skills catering to the global job market. The program imparts fundamental knowledge of major technical, conceptual, and research issues in the area of tax and taxation and provides training in the practical and procedural aspects of taxation. Students of this program get to explore the ethical and legal obligations of practicing in the area of taxation and collaborating with tax practitioners. The program also focuses on developing skills in research, analysis and independent writing in the areas of taxation and public finance. Since the beginning, 299 students have been admitted in the program in six batches. In a recent semester (January-June, 2020), the number of enrolled students was 189.

# **DBA PROGRAM**

Doctor of Business Administration (DBA) is a newly introduced program of the Department in 2014. The main objective of the program is to train business leaders and top-level executives to solve real business problems using action research. The program is of four (04) years duration covering ten (10) course work components and one thesis. A student should complete the course work and thesis within four years.

### MPhil AND PhD PROGRAMS

As a centre of excellence in accounting research in Bangladesh, the department's expertise and strength in research is based on applying intellectual rigor and various empirical techniques to investigate and understand accounting issues. This objective is achieved through its Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) programs. MPhil is designed for students who wish to increase their knowledge in accounting through research. It aims to deepen insight into underlying paradigms, advanced theory and research processes. PhD, on the other hand, is designed to equip students with advanced research training in accounting and also to promote research, which makes an original and significant contribution to the discipline. The business graduates working in business houses, academics and researches in educational and other specialized research organizations, governmental organizations, and other autonomous bodies can get admission to these programs as per the rules of the University of Dhaka. The students are required to complete course works and on completion of the course work they have to write a thesis on a particular topic for the award of the degree.

### **CO-CURRICULAR ACTIVITIES OF THE DEPARTMENT**

Historically, Accounting & Information Systems has been one of the leading departments to take part in all the co-curricular events organized by the university. The Department has put its footsteps in every sports event like football, cricket, basketball, etc. and glorified its achievements by winning different trophies in different sports. Along with a remarkable academic and professional track record, the Department of Accounting & Information Systems has an illustrious athletic history. The discipline, unity, and bonding of this department have produced some finest players in the history of the University of Dhaka. This department hopes to continue to expand on its sports legacy in the future. The Department of Accounting & Information Systems Football Team earned the glory of becoming Champion in "Inter Department Football Tournament - 2015". A&IS Cricket Team holds the legacy of becoming three-time finalists within six years. The cricket team became runner-up in the Inter-Department Cricket Tournament 2012-13 and 2015-16 consecutively. At last, it became Champion in the Inter-Department Cricket Tournament arranged in the year 2017-18. The basketball team has glorious history in the inter department basket tournament of the University. It has been fighting for either championship position or runners-up position almost every year in the University for a very long time in the past. They became runner up in 2003-04 and became champion in 2006-07 in the inter department tournament of University of Dhaka. The students of this department have won numerous prizes in swimming, athletics, table tennis, volleyball, badminton, etc. in the events arranged by the different halls and DU authority. Ex-student of this department won commonwealth shooting medal too.

At the cultural arena, the students of this department took pioneering role in setting up debating culture in the country and creating debating societies throughout Bangladesh. Students participated at national and international level competition and won prizes. The department arranges "Accounting Week" in almost every alternate year where students reveal their talents in the area of musical and literacy events. Students also organize cultural shows of their own at the TSC or Faculty Conference Hall on a regular basis mostly after completion of their degree programs.

The department arranges study tours inside the country as well as in SAARC countries at regular intervals. The students actively take part in various social and religious events. At times of crisis at national level like flood, tornado, cyclone etc., they quickly from teams to rush to the disaster area all over the country to help victims. Students of the department donate bloods at regular interval and come forward to help people around them in every possible way.

#### LOGISTICS AND SUPPORT SERVICES

As the oldest public university in Bangladesh, the University of Dhaka possesses a huge amount of resources at its disposal. Its lush green premises and numerous structures built up at recent times as well as centuries ago has got a tremendous attraction to all who live inside or come as visitors. Students, teachers and all support staffs enjoy living inside the Dhaka University Campus. The campus consist of academic buildings for all the faculties and institutes, library buildings, administrative buildings, residential halls for students, residential areas for teachers and support staff, Teachers-Student Center (TSC) for co-curricular activities, gymnasium and swimming pool, medical center with a hospital, mosques and prayer places, several playgrounds, schools and colleges for the children, food corners, grocery and stationery shops etc. The university operates its own bus services throughout the city and suburb for students and employees. The entire academic and support services including tuition and fees are highly subsidized. In most cases, many of the support services are free for students.

Apart from the common facilities of the university, a student of the Faculty of Business Studies, now consisting of nine departments, enjoys some additional benefits. The faculty has got its own rich library. Every year new books are added to the library stock. The Department has a good collection of books as well. A student can borrow the book following the departmental rules. All the departments have got air-conditioned office complexes. All the classrooms are fitted with split-type air-conditioners. All the examination halls at 5th floor have been fitted with split-type air-conditioners. There are modern computer labs with broadband internet connections for all the departments. All the teachers of the Faculty have been provided with latest computers in their rooms along with broadband internet connections. Broadband internet connections have been extended to the classroom too. All the classrooms have got sound systems with whiteboard and multimedia screens. Teachers of the Department of Accounting & Information Systems use multimedia projectors in delivering of lectures. Some teachers are also using online blackboard to facilitate the learning process of students. The Faculty has separate conference halls for students and teachers, as well as lounges for teachers and female students. Besides, a new building is constructed for the MBA program of the Faculty with ten floors providing the latest facilities for the students and teachers.

Sometimes, students need documents as proof of their studentship at the department. Department usually issues the required documents. Students can collect their provisional certificates, partial transcripts/grade sheets, testimonials etc. from departmental office by paying a stipulated amount of fee. The responsibilities of student counseling are assigned to

three honorable faculty members at the department. They guide students on academic matters as and when necessary.

#### **ALUMNI AND THE EXTERNAL FOCUS**

The department has a strong alumni association named as Accounting Alumni. This is an association for all ex-students of the department. Its office is situated at the Department of Accounting & Information Systems, University of Dhaka. Under its constitution, all the batches have their own sub-alumni association. The association has scholarship and benevolent programs, organizes Habibullah Memorial Lectures, awards Gold Medals to the best student as well as the best researcher, and also holds regular social programs including biannual re-union and picnic, Accounting Night, Iftar party etc. These programs give the opportunity to share happy feelings with friends and fellows. Apart from these events, every executive committee meeting is preceded by a seminar on a contemporary issue, where BBA and MBA students are invited to attend. Alumni association offers scholarships to the existing students and provides other supports. Especially, in case of internship placement, the departmentmostly depends on them. Alumni provide financial support to student programs like study tours, cultural and debating events.

The department through an invitation made to eminent business personalities arranges regular seminars on topics of interest. An exchange of ideas with the employer groups in the business and government is also made at the initiative of the department. Faculty members of the department actively participate in the employment process of various business enterprises, semi-government and autonomous bodies in the country. Senior faculty members also take active part in the activities of the Public Service Commission of the Government of Bangladesh. The department in an unbiased manner controls and looks into the interest of all existing and ex-students as long as it concerns with their professional career. The department maintains a close relation with the professional bodies in accounting in the country for developing future plans and policies. Through highest quality of research endeavour, reflected in the professional publications, the faculty of the department is playing a pioneering role in shaping up the future of accounting in Bangladesh.

### **BURSARIES AND SCHOLARSHIPS**

Department of Accounting & Information Systems supports the meritorious and financially challenged students. Merit based scholarships are given by the Accounting Alumni and Professor A. B. M. Khalid Memorial Trust among others. Professor Dr. M. Habibullah Gold Medal is awarded to the top CGPA achiever in the master's program. Al Maruf Khan Gold Medal is awarded to the top CGPA achiever in the Department in both regular BBA and MBA program. The top CGPA holder from the Faculty of Business Studies receives the UGC merit scholarship award from the Prime Minister. Also, the Department has been able to create a scholarship fund from surplus generated by its Executive MBA program; this was possible due to the prudent financial management of the Department. This fund is invested as fixed deposit and the income from the fund is used for bursaries and scholarships among students. Moreover, the Department welcomes contribution from individuals and organizations to the scholarship fund; income from that particular fund is distributed as scholarship in the name suggested by the donor.

Bursaries and scholarships for students are done through a need and merit-based evaluation process. A six-member committee scrutinizes students' applications and takes interviews to

determine each year's scholarship recipients. Students get scholarship, for a full year only. In the subsequent year(s), a students need to go through the same selection process.

# ACCOUNTING RESEARCH INITIATIVE (ARI)

Accounting Research Initiative (ARI) is an initiative from the Department that arranges monthly research seminars, workshops, guest speaker events on contemporary accounting and business topics. Started in 2018, ARI has been functioning as an active platform to inform, share and interact on upcoming and ongoing accounting and business knowledge among scholars and researchers. ARI, in general, arranges a seminar every month at Room No - 5002, MBA Building, Faculty of Business Studies. As of February 2023, ARI has successfully organized 20 seminars.

# WORLD RANKING OF THE DEPARTMENT

The Department of Accounting and Information Systems, University of Dhaka is ranked 250~300 range in the QS World University Rankings 2022 by subject. This is perhaps the best in the country in the subject category. In 2022, Harvard University's accounting discipline top the ranking list followed by Stanford University, MIT University, and the University of Oxford. Universities which are also in the 250-300 QS Ranking are: University of University of Houston and University of Iowa in the USA, University of Gothenburg and Uppsala University in Sweden, and University of Ottawa, Canada. This ranking of Accounting as discipline is a manifestation of the contribution of the faculty members for the development of accounting scholarship through research and teaching.

# Department of Accounting & Information Systems Members of the Teaching Staff (As of February, 2023)

#### Chairman

**Professor Dr. Dhiman Kumar Chowdhury, FCMA** B. Com. (Hons.); M. Com. (Dhaka); PhD (Lancaster, UK).

## Professors

**Professor Mamtaz Uddin Ahmed, FCMA** B. Com. (Hons.); M. Com. (Dhaka) (**Treasurer, University of Dhaka**)

**Professor Dr. Riazur Rahman Chowdhury** B. Com. (Hons.); M. Com. (Dhaka); PhD (Dundee, UK).

**Professor Md. Maksudur Rahman Sarker, FCMA** B. Com. (Hons.); M. Com. (Dhaka); MBA (Canada).

**Professor Dr. Mahmuda Akter (On Leave)** B. Com. (Hons.); M. Com. (Dhaka); PhD (Tsukuba, Japan).

**Professor Dr. Mahfuzul Hoque** B. Com. (Hons.); M. Com. (Dhaka); PhD (Tsukuba, Japan).

**Professor Md. Nazim Uddin Bhuiyan, FCMA** B. Com. (Hons.); M. Com. (Dhaka).

**Professor Dr. Md. Monzur Morshed (On Leave)** B. Sc. (Hons.); M. Sc. (BUET); M. Sc. (Japan); PhD (Staffordshire, UK).

**Professor Dr. Md. Sharif Hossain** B. Sc. (Hons.); M. Sc. (Dhaka); M. A. in Economics (Japan); PhD (Kyushu, Japan).

**Professor Dr. Mizanur Rahman (On Deputation)** B. Com. (Hons.); M. Com. (Dhaka); Master in Public Policy (Japan); PhD (Japan).

**Professor Dr. Md. Hamid Ullah Bhuiyan (On Deputation)** B. Com. (Hons.); M. Com. (Dhaka), PhD (LaTrobe, Australia).

**Professor Dr. Yousuf Kamal (On Leave)** BBA (Dhaka); MBA (Dhaka); M.S. (Australia); PhD (RMIT, Australia).

**Professor Dr. Mohammad Tareq** BBA (Dhaka); MBA in Finance (Japan); PhD in Accounting (Australia).

**Professor Sadia Afroze** B. Com. (Hons.); M. Com. (Dhaka).

#### **Professor Dr. Dewan Mahboob Hossain**

B. Com. (Hons.); M. Com. (Dhaka); M. Com. (Australia); MHS in Sociology & Anthropology (Malaysia); PhD (IIUM, Malaysia).

#### **Professor Amirus Salat**

BBA (Dhaka); MBA (Dhaka); M.Sc. (Ryerson, Canada).

#### Professor Tanzina Haque, FCMA

BBA (Dhaka); MBA (Dhaka); M.S. (Melbourne, Australia).

**Professor Dr. Ranjan Kumar Mitra, FCMA** BBA (Dhaka); MBA (Dhaka); PhD (Kobe, Japan).

#### **Professor Dr. Md. Musfiqur Rahman, FCMA** BBA (Dhaka); MBA (Dhaka); PhD (Kobe, Japan).

#### **Associate Professors**

**Mr. Al-Amin** BBA (Dhaka); MBA (Dhaka).

**Ms. Rumana Ahmed** BBA (Dhaka); MBA (Dhaka).

**Ms. Bilkis Akhter, FCMA** BBA (Dhaka); MBA (Dhaka).

**Dr. Mohammed Mehadi Masud Mazumder, FCMA (On Leave)** BBA (Dhaka); MBA (Dhaka); PhD (Tohoku, Japan).

**Dr. Md. Saiful Alam, FCMA** BBA (Dhaka); MBA (Dhaka); MSc. (Manchester, UK); PhD (Glasgow, UK).

**Dr. Mohammad Moniruzzaman, FCA, ACMA, AFHEA** BBA (Dhaka); MBA (Dhaka); PhD (Essex, UK).

**Ms. Ishter Mahal** BBA (Dhaka); MBA (Dhaka); RMS (Extra Maduro, Spain).

**Dr. Md. Jamil Sharif, FCMA** BBA (Dhaka); MBA (Dhaka); PhD (Tohoku, Japan).

**Dr. Minhaj Ferdous** B. Engg.; MBA (UK); PhD (Hong Kong).

**Ms. Moshahida Sultana (On Study Leave)** B.S.S. (Hons); M.Sc. in Economics (USA); Master of City Planning (USA).

**Ms. Kawsar Jahan** B.Sc. (Hons); M.Sc. (Dhaka); MBA (Dhaka).

**Dr. Anup Kumar Saha, FCMA (On Leave)** BBA (Dhaka); MBA (Dhaka); PhD (Durham, UK).

#### **Assistant Professors**

**Mr. Md. Mazharul Anwar** B.Sc. (Hons); M.Sc. (Dhaka).

**Ms. Fatema-Tuz-Zohra (On Study Leave)** BBA (Dhaka); MBA (Dhaka); MSc (Manchester, UK).

**Ms. Tahmina Ahmed (On Study Leave)** BBA (Dhaka); MBA (Dhaka); Master of Accounting (Ohio, USA).

**Mr. Shah Alam, ACMA** BBA (Dhaka); MBA (Dhaka).

**Mr. Md. Ahasan Uddin, ACMA** BBA (Dhaka); MBA (Dhaka).

**Ms. Jannatul Naima (On Study Leave)** BBA (Dhaka); MBA (Dhaka); MSc. (Edinburgh, UK).

**Mr. Md. Mahadi Hasan** BBA (Dhaka); MBA (Dhaka).

**Mr. Mohammad Saif Uddin Bhuiyah, ACMA** BBA (Dhaka); MBA (Dhaka).

**Mr. Md. Rezaul Karim** BBA (Dhaka); MBA (Dhaka).

**Ms. Hasina Begum** BBA (Dhaka); MBA (Dhaka).

**Mr. Ahmed Rizvan Hasan** BBA (Dhaka); MBA (Dhaka).

#### Lecturers

**Ms. Asia Khatun** BBA (Dhaka); MBA (Dhaka).

**Mr. Md. Sahid Hossain (On Study Leave)** BBA (Dhaka); MBA (Dhaka).

**Mr. Raihan Sobhan** BBA (Dhaka); MBA (Dhaka).

# **OFFICERS AND STAFFS**

**Ms. Alhamra Parvin** Principal Administrative Officer

Mr. Mahaboob Ahamed Senior Technical Officer

Mr.Sheikh Rowshanuzzaman Dipu Administrative Officer (Executive MBA Program)

Mr. Md. Ali Reza Khan Administrative Officer (MPA Program)

Ms. Shirin Akter Senior Photocopy Machine Operator, Grade-2

Ms. Mamtaz Begum Computer Lab Attendant

Mr. Md. Abu Bakar Siddiq Computer Lab Attendant

**Mr. Md. Ismail Sarder** Office Shahayak

**Mr. Md. Umor Faruq** Office Shahayak

Mr. Md. Alamgir Hossain Class Bearer

# **RULES FOR BBA PROGRAM** Effective from BBA 28<sup>th</sup> Batch

#### Admission

As per university rules, students from all disciplines are eligible to be admitted into the BBA program. After the announcement of admission test date, intending students should apply through the prescribed application form. A rigorous written test is conducted for the applicants. A combined score is developed based on marks in the written test and results of SSC and HSC examinations. Selections are made based on the combined score. After getting admitted to a department, students may apply for change of department within three weeks of admission.

The name of the degree shall be BBA with major in Accounting & Information Systems/Management/Marketing/Finance/Banking/International Business/MIS/THM/OSL. The major part shall be named after the name of the department from which the program has been completed and the degree has been earned. It should be noted that BBA is a terminal degree.

#### **Program Duration and Course Distribution**

The duration of BBA program is four years divided into eight semesters. A total of 126 credit hours has to be completed by the students in 40 taught courses, four viva-voce examinations and an internship program. Every semester will be of nineteen weeks of which fifteen weeks for class teaching, at least one week break and three weeks for holding the semester final examinations.

For each course unit, there will be two lectures of one and half hours each in every week and each course unit will be given a weight of 3 credit hours. Students have to appear before viva-voce exams at the end of each class year (i.e., second semester, fourth semester, sixth semester and eighth semester). In addition, students have to undergo an internship of one and half months at the end of eighth semester. As an alternative to the internship program, students can also prepare a research paper. The internship and research paper carries 3 credit hours and the viva-voce carries 3 credit hours. A total of 126 credit hours in the BBA program are distributed as follows:

Class Year	Number of Courses		Total Course	Credit
	First Semester	Second Semester	Units	Hours
Course Works				
First Year	5	5	10	30
Second Year	5	5	10	30
Third Year	5	5	10	30
Fourth Year	5	5	10	30
Viva-Voce and	Internship			
Viva-Voce				
Project Paper				
TOTAL				126

The BBA program shall be evaluated on the basis of 4,200 total marks. Out of which 4,000 marks shall be for 40 teaching course units, 100 marks for viva-voce examination, and 100 marks for an intensive internship program or preparation of a research paper. The 4-year BBA program has to be completed by maximum of six years from the date of original entry.

#### **Evaluation and Grading**

Performance of students in a course shall be evaluated as follows:

Mid Term / In-course Examination-1	15 percent
Mid Term / In-course Examination-2	15 percent
Quizzes/Term Paper/Assignments/Class Attendance	10 percent
Semester Final	60 percent
Total	100 percent

Two in-course tests, one-hour duration each, shall be conducted and evaluated by the course teacher and the semester final scripts will be evaluated by two examiners. The average of the marks given by two examiners is considered as the final exam mark of a particular student. If the difference between the marks of two examiners is more than 20%, the script is evaluated by a third examiner and the average mark of the nearest two is considered for grading.

The third examiner for a course shall be appointed by the examination committee from the panel of examiners other than a member of the examination committee or a tabulator, provided he/she was not an examiner of this course.

The total mark, average of marks awarded by the semester final examiners plus the marks awarded by the course teacher, is converted into letter grade as follows:

Mark Range	LetterGrade	Grade Point	Interpretation
80+	A+	4.00	Outstanding
75-79	А	3.75	Excellent
70- 74	A-	3.50	Very Good
65-69	B+	3.25	Good
60-64	В	3.00	Average
55-59	B-	2.75	Below Average
50-54	C+	2.50	Fair
45-49	С	2.25	Poor
40-44	D	2.00	Minimum Pass
Below 40	F	0	Fail
•••••	Ι	••••••	Incomplete
•••••	W	•••••	Withdrawn

In the tabulation process, only the total marks (out of 100) of a course will be rounded-up and the published results of the semester will show the grades earned and the grade point average (GPA).

At the end of second semester of each class year, the examination committee will hold a vivavoce examination of 25% weight, equivalent to 0.75 credit hours. For the viva-voce examination, a student will be awarded one grade at the end of 4<sup>th</sup>year. After the completion of the 4<sup>th</sup>year second semester final examination, a student will undergo a one-and-.halfmonth long internship program or write a project/research paper which shall be submitted to the 4<sup>th</sup>year Examination committee. The internship program or the project paper shall be guided and examined by the supervising teacher, selected by the Examination Committee.

The controller of examinations shall publish the cumulative result of the program and shall provide the transcript showing course-wise grades and the Cumulative Grade Point Average (CGPA) earned by the candidates for the degree of BBA.

The Chairman of the Department keeps the evaluated scripts in his/her custody for at least two months after the announcement of the results after which the scripts are disposed of according to the university practice.

#### **Class Attendance**

To be considered as a regular student, each student is required to attend 75 percent of classes held in a course. If attendance falls within 60–74%, Non-Collegiate status will be attached and a student will only be allowed to sit for the semester final examination after paying a fine of Tk. 5,000 per course. The chairman of the department shall monitor class holding and attendance of students. A student will not be allowed to sit for semester final examination and will be required to seek readmission in the program, if his/her attendance falls below 60% in any course in any semester.

#### Promotion

For getting promotion from one class year to the next, a student is required to earn minimum CGPA with improved grades (except viva-voce grade) as follows:

Class Year	Minimum CGPA
From First Year to Second Year	2.00
From Second Year to Third Year	2.25
From Third Year to Fourth Year	2.50

The minimum CGPA of a student, as mentioned above, is calculated by considering the grade points earned in courses of all previous class years. A student failing to clear up university/ departmental dues shall not be promoted to the next class year.

#### **Degree Requirements**

For the BBA degree, each student is required to:

- (i) Complete 126 credit hours including a viva-voce and project paper;
- (ii) Earn a minimum CGPA of 2.50; and
- (iii) Complete the program in maximum of six consecutive academic years including the

year of first admission into the program.

#### **Improvement of Grades**

A student earning B or below B grade in any course in any year (except fourth year) can improve the grade through improvement examination with the following batch. However, no improvement examination shall be allowed to improve the marks obtained in the Mid-Term/In-course tests and the grades earned in viva-voce. Besides, students shall not be allowed to sit for the improvement examination if they did not attend the semester final examination. In case of improvement examination, a student's previous grade earned will be cancelled automatically. Nevertheless, students with 'F' grade in any course shall be allowed to improve twice/two times only with the following batches subject to the payment of all related fees of the improvement examination by the student. In case a student fails to pass the improvement examination, he/she will be required to apply for re-admission with the following batch.

# 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 after the publication of the final result by the Office of the Controller of Examinations but before the issuance of Provisional Certificates by the Controller of

#### Examinations.

#### **Re-Admission**

A student failing to get the required grade points for promotion to the next year may seek readmission with the following batch. A student should apply for re-admission within one month after the publication of result of the concerned year. On re-admission, grades earned earlier by a student in the class year of re-admission shall cease to exist and the student shall have to retake all the courses and examinations. Re-admission shall be allowed only twice in the program. In any case, he/she must complete the BBA program within six years' time from the date of original admission. His/her application after the 6<sup>th</sup> year will not be entertained at all.

#### **Adoption of Unfair Means**

Students adopting unfair means shall be treated according to University rules.

#### Dean's Honor list, Dean's Merit list

Students who have earned GPA of 4.00 in any semester shall be included in the Dean's Merit list of the semester. Students securing a CGPA of at least 3.85 shall be included in the Dean's Honor list of the year.

#### Al Maruf Khan Gold Medal

A student securing the highest CGPA in BBA with a minimum CGPA of 3.90 out of 4.00 and a student of MBA in Accounting with a CGPA of 4.00 out of 4.00 will receive Al Maruf Khan Gold Medal from the university.

#### Academic Administration:

1. At the beginning of each semester, the BBA program office shall announce (with the approval of the academic committee) academic calendar for each semester. The academic calendar includes 15 weeks of class, two weeks for two Mid-term examinations and two weeks for holding the final examinations.

The BBA Program office is responsible for the academic administration of the BBA program. The BBA program administration is assisted by batch coordinators. The Academic Committee of the department nominates one of its members to act as the Coordinator for each batch.

Respective statutory authorities of the university shall design syllabus, allocate courses for teaching, constitute examination committee and the panel of examiners as per rules of the university.

- 2. At the beginning of a semester
  - a. A course teacher shall provide the students a course outline indicating the text book to be followed, probable dates of in-course tests.
  - b. The Chairman of the Department shall provide the Dean of the Faculty and the students a schedule indicating 15 weeks of class teaching, 1 week break, 3 weeks of examinations and the following 4 weeks for the publication of result of-the batch.
  - c. The academic committee of the Department shall constitute an examination

committee for each year of the Program. The examination committee shall be composed of 4 members, one of which shall be an external member who shall be appointed from outside the Department. In case of any vacancy or inability on the part of a member/examiner, the examination work shall not be invalidated.

- 3. The examination committee shall appoint two question setters and examiners including the course teacher for each course and moderate and print questions, hold semester final and viva voce examinations, appoint tabulators, announce semester results and recommend students promotion to the next year.
- 4. The Chairman of the Examination Committee shall submit the semester final examination result and the relevant scripts to the Chairman of the Department including:
  - a. A grade-sheet and all the connected working papers.
  - b. A list of students recommended for promotion to the next year class.
  - c. A list of teachers showing their involvements in the examination works.
  - d. Copies of the Grade-sheet and the average in-course marks of all courses of the semester/year for the program coordinator of the batch.
- 5. The Chairman of the examination committee shall also submit a copy of the tabulated result of each semester to the Controller of Examinations immediately after the announcement of the semester final results.
- 6. The course teacher shall announce the result of the in-course tests within two weeks of the date of holding the tests and submit the average in-course marks to the chairman of the examination committee before the semester final examination starts. Tabulation work will be started after the marks of term final are received by the Chairman. Modification of submitted marks shall not be allowed.
- 7. For smooth administration of the BBA Program, the Academic Committee shall nominate one of its members to act as the BBA Program Coordinator for each batch. The Co-ordinator will assist the Chairman of the Department in matters relating to improvement of grade, readmission and promotion, preparation of Dean's Honor and Merit List, semester scheduling and monitoring the results of the batch.
- 8. Within the framework of these rules and the rules of the University, the Departmental Academic Committee may adopt policies for strengthening the academic and co-academic activities of the Department.
- 9. For appearing at each semester final examination, every student shall have to fill in examination entry form supplied by the Controller of Examinations on payment of dues.
- 10. The Chairman of the Department shall hold the evaluated scripts in his custody for at least two months after announcement of the results and after that the scripts will be disposed-off according to the university practice.
- 11. Any deviation from the rules of the program will require:
  - a. Recommendation of the Departmental Academic Committee.
  - b. Consent of the Dean, and
  - c. Approval of the Academic Council of the University.

# Calculation of Cumulative Grade Point Average (CGPA) Example:

First Year First Semester					
	(1)	(2)	(3)	$(4) = (1) \times (3)$	
Course	No. of Credits	Grade Awarded	Total Grade Points	Grade Points Secured	
1101	3	В	3.00	9.00	
1102	3	A+	4.00	12.00	
1103	3	D	2.00	6.00	
1104	3	А	3.75	11.25	
1105	3	A–	3.50	10.50	
Total	15			48.75	

SGPA = Total Grade Points Secured  $\div$  Total Number of Credits = 48.75  $\div$  15 = 3.25

First Tear Second Semester				
	(1)	(2)	(3)	$(4) = (1) \times (3)$
Course	No. of Credits	Grade Awarded	Total Grade Points	Grade Points
				Secured
1201	3	В	3.00	9.00
1202	3	C+	2.50	7.50
1203	3	D	2.00	6.00
1204	3	А	3.75	11.25
1205	3	A+	4.00	12.00
Total	15			45.75

First Year Second Semester

SGPA = Total Grade Points Secured  $\div$  Total Number of Credits =  $45.75 \div 15 = 3.05$ 

#### **Cumulative Data:**

Total Credit = (15+15) = 30

Total Grade Points Secured = (48.75 + 45.75) = 94.50

Cumulative Grade Point Average (CGPA) =  $94.50 \div 30 = 3.15$ 

# **Courses for BBA** Effective From 28th Batch (Session: 2021-2022)

	FIRST YEAR				
First S	First Semester Second Semester				
1101	Introduction to Financial Accounting	1201	Intermediate Accounting		
1102	Introduction to Business	1202	Microeconomics		
1103	Computer Concepts and Applications	1203	Management and Organizational Behavior		
1104	Mathematics for Business Decisions-I	1204	Mathematics for Business Decisions-II		
1105	Business Communication	1205	Bangladesh Studies		
	SECO	ND YEA	AR		
First S	Semester	Secon	d Semester		
2101	Advanced Financial Accounting-I	2201	Advanced Financial Accounting-II		
2102	Macroeconomics	2202	Financial Management		
2103	Programming and Database Management	2203	Cost Accounting		
2104	General Science and Environment	2204	Marketing		
2105	Business Statistics-I	2205	Business Statistics-II		
	THIR	RD YEA	R		
First S	Semester	Secon	d Semester		
3101	Management Accounting	3201	Forensic Accounting and Fraud Investigation		
3102	Banking and Insurance	3202	Corporate Finance		
3103	Audit and Assurance	3203 Accounting Information Systems			
3104	Income Tax: Laws and Practice	3204 VAT and Cross-border Taxation			
3105	Business Laws	3205 Corporate Laws, Governance and Secretarial			
		Practices			
	FOUR	TH YEA	AR		
First Semester Second Semester		d Semester			
4101	Advanced Management Accounting	4201 Accounting Theory			
4102	Financial Market and Investment Analysis	4202	Business Analysis and Valuation		
4103	IT Governance and Information System Audit	4203	Data Analytics		
4104	Supply Chain and Operation Management	4204	Strategic Management		
4105	Public Sector Accounting and Financial Management	4205	Research Methodology		

# **DETAILED SYLLABUS**

# FIRST YEAR FIRST SEMESTER

#### **1101: Introduction to Financial Accounting**

#### **Course Objectives:**

The objective of this course is to develop students' understanding of basic concepts of accounting, accounting process, and the application of the conceptual framework in such process in order to develop their abilities to complete the accounting cycle ending with preparation and presentation of financial statements. This course will also try to equip the students with the knowledge and ability to understand and analyze the information communicated through the financial statements.

### Intended Learning Outcomes (ILOs):

Upon completion of the course, students should be able to:

- 1. Explain what accounting is and its purpose and nature.
- 2. Understand the key sources of regulation of accounting, particularly in Bangladesh.
- 3. Explain the key components of IASB conceptual framework and their use.
- 4. Identify the recording process and steps of accounting cycle.
- 5. Understand the difference between service and merchandising companies, including inventory recording process of merchandising concern.
- 6. Understand the system design of accounting; and
- 7. Prepare statement of financial position, statement of profit or loss and other comprehensive income and statement of changes in equity.

### **Detailed Course Contents:**

### 1. Introduction to Accounting: [ILO 1]

Definition of Accounting; Uses and Users of Accounting Information; Measurement Principles; Assumptions; Elements of Financial Statements; Basic Accounting Equation; Transaction analysis; Financial Statements.

### 2. Accounting Regulation and Conceptual Framework: [ILO 2, ILO 3]

The IFRS Foundation; the IASB; Setting of IFRS; Standard Setting Process in Bangladesh; the Financial Reporting Council (FRC); the Companies Act 1994; the Securities and Exchange Rules 1987; BSEC Directives; the Income Tax Ordinance 1984; the ICAB; ICMAB; GAAP; IASB vs FASB.

IASB Conceptual Framework: Introduction; Objective of General-Purpose Financial Reporting; Assumptions and Principles; Qualitative Characteristics of Useful Financial Information; Financial Statements and the Reporting Entity; Elements of Financial Statements; Recognition and Derecognition; Measurement; Presentation and Disclosure; Concepts of Capital and Capital Maintenance.

### 3. The Recording Process and Accounting Cycle: [ILO 4]

The Account; Chart of Account; Debit Credit Procedures; Double-Entry Accounting System; Recording process: Journal, Ledger, Trail balance, Adjustments; Need for Adjustments; Adjusted Trial Balance; Preparation of Financial Statements; Closing Entries; Post-Closing Trial Balance; Preparation of Work Sheet and Reversing Entries; Correcting Entries.

## 4. Accounting for Merchandising Concern: [ILO 5]

Operating Cycle; Accounting for Merchandizing Operation under Perpetual and Periodic Inventory System; Completing Accounting Cycle.

## 5. Accounting System Design: [ILO 6]

Charts of Accounts; Coding of Accounts; Control Accounts; Purposes of Control Accounts; Special Journals; Advantages of Special Journals; Cash Receipt Journal; Cash Payment Journal; Sales Journals; Purchase Journal; General Ledgers; Subsidiary Ledgers.

# 6. Accounting for Companies: [ILO 7]

Accounting for Share Transactions; Dividends; Retained Earnings, IAS 1-Presentation of Financial Statements; Financial Statements for a Company according to IAS 1 (Statement of Financial Position, Statement of Profit or loss and Other Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows and Notes, Comprising Significant Accounting Policies and Other Explanatory Information); Template of a Company's Financial Statements; Financial Statements; Preparation using MS Excel.

### **Recommended Textbooks:**

- 1. Weygandt, J. J., Kimmel, P. D. and Kieso, D. E. Accounting Principles IFRS Version (John Wiley & Sons, Inc.).
- 2. Needles, B. E., Powers, M. and Crosson, S. V. *Principles of Accounting* (Houghton Mifflin Company).

### **Reference Materials:**

- 1. Annual Report of Listed Companies for Understating Financial Statements.
- 2. MS Excel as a tool for the preparation of Financial Statements.

#### **1102: Introduction to Business**

#### **Course Objectives:**

The course is intended to enhance students' understanding of business, the business environment, the functional areas of an organization, and the role business plays in today's society. Students will acquire a broad-based knowledge of business and the business Environment.

### Intended Learning Outcomes (ILOs):

Upon successful completion of this course, students will be able to:

- 1. Understand the fundamental concepts, theories, and models in carrying out business and ethical management.
- 2. Demonstrate a vocabulary of business terms.
- 3. Illustrate the evolution of business from the feudalism to modern capitalism.

- 4. Distinguish different forms of business and comprehend the roles of different stakeholders.
- 5. Formulate the vision and mission of a business.
- 6. Examine the PESTEL factors and gain a basic understanding of competition.
- 7. Explore the activities of different functional areas of a business.
- 8. Develop an understanding of socially responsible business practices.
- 9. Identify the relevance of international business in modern era.
- 10. Gain a basic understanding of the nature of entrepreneurship.
- 11. Realize the importance of global and regional business associations.

### **Detailed Course Contents:**

1. The nature of business: [ILO 1, ILO 2]

Definition of Business; Vision; Mission; Indicators of A Successful Business; Customer Needs; Quality Products and Services; The Challenges and Complexities of Today's Business; Forms of Business Ownership; MNCs.

# 2. The Evolution of Business: [ILO 3]

Feudalism: Land, Labour and Property Rights; Money, Capital and Commerce; Mercantilism: Trade and Enterprise; The Growth of Enterprise; Industrial Revolution: First to Fourth IR; The Changing Forms of Business Organization.

# 3. The Stakeholders: [ILO 4]

Stockholders; Board of Directors (BOD); Management; Government; Community.

4. Business Environment:

# 4.1 The Impact of External Forces: [ILO 2, ILO 6]

Political forces; Economic Forces; Social Forces; Technological Forces; Natural Environment and Business; Legal Forces; Competition; Porter's Five Forces Model; Opportunities and Threats.

# 4.2 The Internal Environment: [ILO 2, ILO 7]

Accounting & Finance; Marketing; Human Resource Management; Production/Operation; Management Information Systems; Research & Development; Porter's Generic Value Chain; Strengths and Weaknesses; An Introduction to SWOT.

# 5. Management: [ILO 2, ILO 7]

Definition of Management; Decision making; Planning; Organizing; Leading; Motivating; Controlling.

6. Marketing: [ILO 2, ILO 7] Definition of Marketing; Product; Pricing; Promotion; Place.

# 7. Finance: [ILO 2, ILO 7]

Equity vs. Debt; Financial Markets; Stock Market; Blockchain/ Fintech.

# 8. International Business: [ILO 2, ILO 9]

Introduction and overview of international business; Environmental variables of culture, politics, and economics; Entry strategies for new markets and countries; International trade and foreign direct investment; Global outsourcing and its role in international operations.

# 9. Ethics and Social Responsibility of Business: [ILO 2, ILO 8]

Ethics; Business ethics; The Need for Business Ethics; Ethical Dilemma; Corporate Social Responsibility; Sustainable Development Goals (SDGs); Social Business.

#### 10. Entrepreneurship: [ILO 2, ILO 10]

Definition of Entrepreneurs and Entrepreneurship; Types of Entrepreneurs; Advantages and Disadvantages of Being an entrepreneur; Characteristics of a Successful Entrepreneur; Start-ups; Franchising.

#### 11. Global, Regional and Local Business Associations: [ILO 2, ILO 11]

Asia-Pacific Economic Cooperation (APEC); Association of Southeast Asian Nations (ASEAN); Bangladesh Garments Manufacturers' Association (BGMEA); BRICS; Federation of Bangladesh Chamber of Commerce and Industries (FBCCI); European Union (EU); Organization for Economic Cooperation and Development (OECD); South Asian Association for Regional Cooperation (SAARC); World Trade Organization (WTO).

#### **Recommended Textbooks:**

- 1. F. L. Fry, C. R. Stoner and R. E. Hattwick, *Business: An Integrative Approach*, (Irwin McGraw-Hill).
- 2. G. R. Jones, Introduction to Business: How Companies Create Value for People, (McGraw-Hill).
- 3. W. G. Nickels, J. M. McHugh and S. McHugh, *Understanding Business*, (McGraw Hill).

#### **Reference Materials:**

1. G. Suder, T. Tsai and S. Varma, Doing Business in Asia, (SAGE)

#### **1103: Computer Concepts and Applications**

### **Course Objectives:**

The objective of this course is to introduce the students to the basic concepts of computers and information systems. The students will be exposed to the use of operating system and the widely used office and application software/packages. The course will also cover the fundamental concepts, theories, practices, and management of information systems in organizations. The aim is to prepare the students with the essential skill sets to survive and thrive in today's technologically driven workplaces.

#### Intended Learning Outcomes (ILOs):

Upon completion of this course, students should be able to:

- 1. To understand the basic knowledge of a computer system.
- 2. Understand the implications of Information Technology (IT) in businesses.
- 3. Be able to identify and operate the basic hardware of a computer system.
- 4. Be able to identify and operate the basic software of a computer system.
- 5. Comprehend the underlying concepts of Computer Communications and Network.
- 6. Understand the operational functions of E-Commerce and the impact of Social E-Commerce and M-Commerce in business.
- 7. Understand the implications of Information Systems (IS) in businesses world.
- 8. Understand fundamentals of Computer Hardware, Software and Operating System.
- 9. Compose documents using word processing packages.
- 10. Prepare slides for business presentations.
- 11. Prepare and analyze data using spreadsheet software.

#### **Detailed Course Contents:**

## PART A: Theory (50%)

### 1. Introduction: [ILO 1, ILO 2]

Definition and Uses of Computers; Computer Generation and Classifications; Computer Organization and Architecture.

### 2. Fundamentals of Computer Hardware: [ILO 3]

Input Hardware; Output Hardware; Processing Hardware; Peripheral and Storage Devices; Processing Characteristics and Functions, Memory Characteristics and Functions.

#### 3. System Software and Application Software: [ILO 4]

Definition and Types of Software; Introduction to Operating System; Introduction to Software Development and Computer Languages; Language Translators: Compiler, Interpreter and Assembler; Integrated Development Environment (IDE); Graphical User Interface (GUI).

#### 4. Computer Network and Internet: [ILO 2, ILO 5]

Definition and Types of Computer Networks; Uses of Computer Networks; Network Topologies; Communication Protocols: TCP/IP, HTTP, FTP; Open System Interconnection (OSI) Model; Network Devices, Communication Media; Introduction to Internet; Internet Protocol (IP) Address; IPv4 and IPv6; Voice over IP; Domain Name System (DNS); Virtual Private Networks; Internet of Things (IoT); Cloud Computing.

#### 5. E-commerce: [ILO 2, ILO 6]

Key Concepts in E-commerce; Digital Markets and Digital Goods in a Global Marketplace; Types of E-commerce; E-commerce Business Models; E-commerce Revenue Models; How has E-commerce Transformed Marketing: Behavioral Targeting, Social E-commerce and Social Network Marketing, Wisdom of Crowds; Role of M-Commerce in Business: Location-Based Services and Applications, Other Mobile Commerce Services.

### 6. Information Systems (IS) in Business: [ILO 7]

Definition and Components of Information Systems (IS); How Information Systems are Transforming Business; Strategic Business Objectives of Information Systems; Dimensions of Information Systems; A Business Perspective on Information Systems; What Academic Disciplines are Used to Study Information Systems: Technical Approach, Behavioral Approach, Sociotechnical Systems; Systems for Different Management Groups: Transaction Processing Systems (TPS), Management Information Systems (MIS), Decision Support Systems (DSS), Executive Support Systems (ESS).

# PART B: Practical (50%)

# 7. Basic Operations of a Computer System: [ILO 8]

Gaining Proficiency in Graphical User Interface (GUI) Operating System e.g., Windows 7/8/10/11, and Linux; PC Hardware Components and Software Components.

# Word Processing with MS Word: [ILO 9] Tools Ribbon; Settings; Tabs; Editing; Formatting; Colours and Styles; Drawing; Tables; Equation; Header/Footer; Page Number; Spell Check; Table of Content; Layout; Print.

9. Making Presentation with MS PowerPoint: [ILO 10]

Slide Presentation; Colours; Style; Theme; Transition; Sound; and Video Linking.

## 10. Spreadsheet Analysis with MS Excel: [ILO 11]

Getting Familiar with the Ribbon; Tools and Features; Use of Function & Formula: Logical, Accounting & Financial, Statistical, Mathematical, Lookup; Graph and Chart; Form; Conditional Formatting; Data Validation; Data Cleaning Techniques; CSV and other File Formats; Pivot Table; Preparation of: Accounting and Financial Statements; Salary Sheet; Bills Statements, Result Sheets etc.

#### Mark Distribution for this Course:

Criteria	<b>Allocated Marks</b>	<b>Result Segments</b>
Mid Term / In-course Examination-1 (Theory)	15	Continuous
Mid Term / In-course Examination-2 (Practical in	15	Assessment
Lab)		(40%)
Quizzes/Term Paper/Assignments/Class Attendance	10	
Semester Final (Theory)	30	Final (60%)
Semester Final (Practical in Lab)	30	
Total	100	

#### **Recommended Textbooks:**

- 1. Hutchinson, S. E. and Sawyer, S. C. Computer & Information Systems (Irwin).
- 2. Laudon, K. C. and Laudon, J. P. *Management Information Systems: Managing the Digital Firm* (Pearson Education).

#### **References Materials:**

- 1. Simkin, M. G., Rose, J. M. and Norman, C. S. Core Concepts of Accounting Information Systems (John Wiley & Sons, Inc.).
- 2. O'Brien, J. O. Management Information Systems: Managing Information Technology in the E-Business Enterprise (McGraw-Hill).
- 3. The Complete Reference MS Office.
- 4. Smith, G. N. *Excel Applications for Accounting Principles* (South-Western College Publishing).

#### 1104: Mathematics for Business Decisions-I

#### **Course Objectives:**

This course is designed to develop an understanding of basic concepts and principles of mathematics used in the area of business and economics. Students will be well-equipped with mathematical tools used in the analysis of business and accounting problems;

### Intended Learning Outcomes (ILOs)

Upon successful completion of this course, students will acquire the following skills and knowledge:

- 1. Demonstrate skills in identification, classification and principle of numbers and real number systems.
- 2. Computing with numbers having different types of indices and surds.

- 3. Demonstrate skills to solve problems with logarithms and anti-logarithms and find the index/power of an equation (like equations linking with time value of money).
- 4. Establish skills on computing and graphing equations and system of equations.
- 5. Establish skills on computing and graphing with inequalities and system of inequalities.
- 6. Demonstrate skills on solving and analyzing roots and their behavioral aspects of higher order equations.
- 7. Develop skills on formation and use different mathematical formulae.
- 8. Demonstrate skills in linking the geometry of linear equation with different economic situation.
- 9. Demonstrate skills in basic concepts, presentation, classification, computation and business application with sets.
- 10. Establish skills in mathematical formulation and problem solving of different sequence, series, and progressions (arithmetic and geometric) with their corresponding business problems.
- 11. Demonstrate core concepts of time value of money and its application in mathematical problem solving.
- 12. Develop skills on theory and mathematics of counting, permutations, and combinations.
- 13. Demonstrate skills to apply mathematical knowledge in business and economic problems.

# **Detailed Course Contents:**

1. Theory of Numbers: [ILO 1]

Introduction to Real number system: Definition and concepts of Rational, Irrational, Integer, Decimal, Prime, Composite, etc. numbers and their Basic Properties. Proof of irrationality of a number.

# 2. Equations and Inequalities: [ILO 4, ILO 5, ILO 6, ILO 7, ILO 13]

**2.1** Definition and concepts of Equations. Concepts of Linear Equation, System of Linear Equations and sketching their graphs. Solving System of Linear Equations. Different Methods for solving a System of Linear Equations (like- Algebraic Method, Method of Substitution, Method of Cross-Multiplication, Method of Determinant, Graphical Method, etc.). Concepts of uniqueness and existence of the solutions.

**2.2** Definition and concepts of Quadratic Equation. Finding Solution or Roots of Quadratic Equations. Discriminants and the Nature of Roots. Relationship between Roots and Coefficients of a Quadratic equation. Mathematical formation of Quadratic and higher-order equations with given roots.

**2.3** Basic Concepts on Nonlinear Equations; System of Nonlinear Equations and their Solutions. Curve Sketching of different linear and non-linear equations.

Application of the above concept of equations and system of equations in Business and Economics problems.

**2.4** Definition, Concepts and Properties of Inequality; Linear, Nonlinear and Absolute Value Inequalities; Solution of Inequalities and their Graphical Representation on real line.

### 3. Applied Linear Equations: [ILO 8, ILO 13]

Linear equation and its different form of expressions. Budget equation in the form of linear equation and the concept of rate of substitution. The Slope and Intercept of a linear equation (y = mx + c) its application to Cost Equation (to discuss the concept of fixed cost, variable cost, total cost, average cost, marginal cost, etc.). The revenue, profit function, break-even point and condition of shutdown. Forming a Linear Cost Equations (when marginal cost and fixes cost or two points are given). Application of linear function/equation to demand-supply equations (to discuss equilibrium point and shifting). Piecewise linear function and its application to Business and Economics.

# 4. Theory of Sets: [ILO 9, ILO 13]

Definition and concepts of Sets, Types of Sets and their expressions. Venn diagram. Theory and Properties of Union, Intersection, Difference, and Complement of sets. De-Morgan's Laws on Sets. Number of Elements in Sets. Concept of Cross Product. Application in Business and Economics Problems.

# 5. Mathematical Induction, Series and Sequences: [ILO 10]

Definition and concepts of sequence and Series. Sigma/Summation notation. Introduction to mathematical induction. Sum of natural numbers.  $n^{th}$  term and sum up to *n* terms of a finite series.

# 6. Progression: [ILO 7, ILO 10, ILO 13]

Arithmetic Progression (AP): Introduction to Arithmetic Progression. Concepts of  $1^{st}$  term and common difference. Mathematical formula of  $n^{th}$  term and sum to n terms. Mathematical Problems, and Application in business and economics problems.

*Geometric Progression (GP)*: Introduction to Geometric Progression. Concepts of  $1^{st}$  term and common ratio. Mathematical formula of  $n^{th}$  term and sum to *n* terms. Proof of annuity formulae. Mathematical Problems and Application in business and economics problems.

# 7. Indices and Logarithms: [ILO 2, ILO 3]

*Indices:* Definition and Laws of Indices. Computation with Integer, Fraction, Positive and Negative indices. Surds and operation with surds. Mathematical Problem relating to Indices and Surds.

*Logarithms:* Definition and Properties of Logarithm. Common and Natural Logarithms. Laws of logarithm. Anti-Logarithm. Mathematical problem with Logarithms.

### 8. Permutations and Combinations: [ILO 12]

*Permutations:* Definition and Concepts Counting, Factorial Notation, and Permutation. Principles and Theorems of Permutations. Permutation of 0 and 1. Permutations of different things, permutation of repeated things, circular permutations, and restricted permutations with mathematical problems.

*Combinations:* Concept and definition of combinations. Principles and theorems of combination. Relationship between permutation and combination. Combination of different things, combination with repeated things and restricted combinations. Mathematical problems.

### **Recommended Textbooks:**

- 1. Bowen, E. K. Mathematics with Applications in Management & Economics (R. D. Irwin).
- 2. Arya, J. C. and Lardner, R. W. *Mathematical Analysis for Business and Economics* (Prentice Hall).

- 3. Arora, P.N. and Bogga, P.C. *Business Mathematics for Commerce andEconomics* (John Wiley& Sons).
- 4. Sanchetti, D.C. and Kapoor, V.K. Business Mathematics (Sultan Chand and Sons).
- 5. Barnett, R. A. and Ziegler, M. R. Applied Business Mathematics (Prentice Hall).

#### **1105: Business Communication**

#### **Course Objectives:**

This course attempts to develop the skill of students in exchanging messages with others in order to develop a mutual understanding of business deals. The students, with their professional oral and written communication skills, will be able to build the expertise needed to succeed in today's technologically-superior workplaces.

### Intended Learning Outcomes (ILOs):

Upon successful completion of this course students will be able to:

- 1. Comprehend the significance of business communication in today's technology-driven workplace.
- 2. Understand ethical, legal, cultural, and global issues influencing business communication.
- 3. Prepare letters, e-mails, memos, and reports persuasively.
- 4. Communicate successfully with colleagues and business clients in in-person and online meetings.
- 5. Deliver oral presentations in a proficient manner.
- 6. Prepare for and participate in job interviews.

### **Detailed Course Contents:**

### 1. Introduction to Communication [ILO 1, ILO 2]

Communication – Communication process/cycle – business communication – objectives and importance of business communication – communication situations – communication barriers – ethical, legal, and cultural considerations in business communication – the importance of technology in today's communication.

2. Types of Communication [ILO 1, ILO 2]

Downward communication – upward communication – horizontal communication – Verbal and Non-verbal communication – the importance of understanding non-verbal communication - grapevine – the process of consensus.

- **3.** Media of Communication [ILO 3, ILO 4, ILO 5] Written communication – oral communication – non-verbal communication – audiovisual communication – technology-driven communication.
- 4. Written Communication [ILO 3] Basic issues regarding writing (selection of words, construction of clear sentences and

paragraphs) – issues related to communicating good, neutral, and bad news – Different types of business letters – memorandum – writing emails.

5. Report Writing [ILO 3]

Issues related to writing both short and long reports - use of graphics - how to compose a report on the computer - how to prepare presentation slides for a report.

 Oral Communication [ILO 4, ILO 5] Informal talking – listening – interviews – meetings – online meetings – telephone conversation – formal speeches – team presentations – presenting reports videoconferencing.

#### 7. Audio-visual Communication [ILO 1, ILO 3, ILO 4, ILO 5]

Types of aids – how to make audio-visual communication effective – technologyenabled audio-visual communication.

8. Formal Business Meetings [ILO 4]

Invitation for a meeting – preparation for a meeting – memorandum, minutes writing – etiquettes – decision-making process – proposal and resolution.

- **9.** Getting prepared for job interviews [ILO 6] Preparation for facing a job interview – preparation for taking a job interview – CV/Resume preparation.
- **10. Citation and Referencing in Academic Writing [ILO 3]** Introduction to referencing styles.

#### **Recommended Textbooks:**

- 1. Thill, J. V. and Bovee, C. L.: *Excellence in Business Communication*, (Irwin McGraw-Hill).
- 2. Locker, K. O. and Kaczmarek, S. K.: Business Communication: Building Critical Skills, (McGraw-Hill).
- 3. Guffey, M. E., Loewy, D. and Almonte, R.: *Essentials of Business Communication*. (Nelson Education).

### FIRST YEAR SECOND SEMESTER

#### **1201: Intermediate Accounting**

#### **Course Objectives:**

This course has been designed with an objective to get the students familiar with the accounting treatments and presentation procedures of the items appearing on the asset side of the Balance Sheet/Statement of Financial Position. This will also provide guidelines for the treatments in case of changes in accounting policies, estimates and errors.

#### Intended Learning Outcomes (ILOs):

Upon completion of the course, students should be able to:

1. Explain the concepts of cash and cash equivalents and their reporting in the financial statement.

- 2. Understand why cash book and bank statement differ and how they are reconciled.
- 3. Explain how accounts receivable and notes receivable are determined, valued and disposed of.
- 4. Understand what costs are included in determining inventories, how cost flow assumptions are used, and inventories are valued.
- 5. Explain the initial and subsequent measurement of plant assets, different valuation models, different depreciation methods, and exchange of plant assets.
- 6. Explain the nature and accounting for non-current assets held for sale and discontinued operations.
- 7. Explain the concept of avoidable interest and its capitalization issues.
- 8. Explain the initial and subsequent measurement of different types of intangible assets.
- 9. Explain how impairment loss is recognized and measured, and how it is reversed.
- 10. Understand the concept of lease and the accounting treatment of different leases.
- 11. Explain how changes in accounting policies and estimates as well as errors are accounted for.

#### **Detailed Course Contents:**

#### 1. Cash and Receivables: [ILO 1, ILO 2, ILO 3]

Nature of Cash; Reporting of Cash: Cash Equivalents, Restricted Cash, Bank Overdrafts; Cash Control; Differences in Amount between Cash Book and Bank Statement; Bank Reconciliation; Nature and Classifications of Receivables; Recognition of Accounts Receivable Using Gross and Net Method; Valuation of Accounts Receivable Using Direct Write-off and Allowance Method; Recognition of Notes Receivable Issued and Not Issued at Face Value with Interest-Bearing and Not-Interest-Bearing Notes; Valuation of Notes Receivable; Derecognition and Transfer of Receivables: Sale of Receivables with and without Guarantee and Secured Borrowing.

#### 2. Inventories: [ILO 4]

Definition and Classification of Inventories; Goods and Costs Included in Inventory; Cost Flow Assumptions: Specific Identification, Average-Cost, and First-In, First-Out (FIFO); Effect of Inventory Errors; Lower-of-Cost-or-Net Realizable Value (LCNRV); Methods of Applying LCNRV; Use of an Allowance; Recovery of Inventory Loss; The Gross Profit Method of Estimating Inventory; Retail Inventory Method; IAS 2.

### 3. Property, Plant and Equipment (PPE): [ILO 5, ILO 6, ILO 6, ILO 9]

Nature and Characteristics of Property, Plant, and Equipment (PPE); Acquisition of PPE; Self-Constructed Assets; Interest Costs During Construction; Qualifying Assets; Valuation of Property, Plant, and Equipment; Exchanges of Non-Monetary Assets; Costs Subsequent to Acquisition; Disposition of Property, Plant, and Equipment; Depreciation; Impairments; Depletion; Revaluations; Non-Current Assets Held for Sale and Discontinued Operations; IAS 16, IAS 23, IAS 36 and IFRS 5.

4. Intangible Assets: [ILO 8, ILO 9]

Nature and Characteristics of Intangible Assets; Valuation of Purchased and Internally Created Intangibles; Amortization of Intangibles; Types of Intangible Assets; Impairment of Limited-Life Intangibles; Reversal of Impairment Loss; Impairment of Goodwill; Research and Development Costs; Accounting for R&D Activities; Costs Similar to R&D Costs; IAS 38, IAS 36.

### 5. Accounting for Lease: [ILO 10]

Nature, Economic Substance, and Advantages of Lease Transactions; Lessee Accounting; Measurement of the Lease Liability and Right of Use (ROE) Asset; Lessor Accounting; Classification of Leases by the Lessor; Accounting Measurement and Presentation; Special Lease Accounting Problems; IFRS 16.

#### 6. Accounting Policies, Changes and Errors: [ILO 11]

Accounting Changes; Changes in Accounting Policy; Retrospective Accounting Change Approach; Changes in Accounting Estimates; Prospective Reporting; Accounting Errors; Error Analysis; Non-Counterbalancing Errors; Counterbalancing Errors, IAS 8.

#### **Recommended Textbooks:**

- 1. Kieso, D. E., Waygandt, J. W. and Warfield, T. D. Intermediate Accounting (IFRS *Edition*) (John Wiley & Sons).
- 2. Picker, R., Leo, K., Radford, J., Alfredson, K., Pactor, P. and Wise, V. Australian Accounting Standards (John Wiley & Sons Australia, Ltd.).
- 3. Deegan, C. Australian Financial Accounting (McGraw-Hill Australia).

#### **1202: Microeconomics**

#### **Course Objectives:**

This course provides students with the foundation theories of basic microeconomics including an introduction into the study of economics and analyses of economic agents' behaviors, particularly that of the individual and the firm. The course begins with a description of the subject area, and continues to introduce the basic concepts and theories that are used as the foundation of microeconomic theory and analysis. This includes discussions and applications of economic principles behind the determination of demand, supply and production functions and on how equilibrium is reached in different markets and the incomes distributed among different factors, the theory of the consumer; theory of producer; market operations; and market structures.

#### Intended Learning Outcomes (ILOs):

Upon completion of the course, students should be able to:

- 1. Understand the nature of microeconomics and Schools of Economic Thoughts.
- 2. Describe the functioning of a market economy through demand and supply and their impact on resource allocation.
- 3. Explain the impact of government-imposed policies on markets.

- 4. Define elasticity and apply the concepts of price elasticity of demand and others.
- 5. Solve a consumer's utility maximization problem.
- 6. Explain the general concepts of production and cost analysis.
- 7. Combine production and cost, short run and long run, and profit and revenues to assess the behavior of markets.
- 8. Analyze different types of market structures. Find the profit maximization output and price in different market structure.
- 9. Understand how to apply economic principles to determine pricing of a factors of production using marginal productivity theory of distribution.

#### **Detailed Course Contents:**

#### 1. Basic Concepts and Ideas: [ILO 1]

Definition and Relevance; Positive and Normative Economics; Scarcity; Opportunity Cost; Production Possibilities Frontier; Preliminary Introduction to Great Schools of Economic Thoughts: Classical, Neo-Classical, Keynesian, Marxist; Difference between Microeconomics and Macroeconomics.

### 2. Demand, Supply and Equilibrium Analysis: [ILO 2]

Law of Demand; Ceteris Paribus Assumption; Demand Equation; Shift of Demand Curve; Movement along the Demand Curve; Law of Supply; Supply Equation; Shift of Supply Curve; Movement along the Supply Curve; Market Equilibrium.

### 3. Market Regulation: [ILO 3]

Market Regulation: Price Ceiling, Price Floor, Quota, Tax; Consumer Surplus; Producer Surplus; Change in Consumer Surplus and Producer Surplus after Regulation.

### 4. Elasticity: [ILO 4]

Elasticity of Demand: Factors Affecting Elasticity of Demand; Price Elasticity; Determinants of Demand Elasticity; Computation and Interpretation of Elasticity of Demand; Point Elasticity and Arc Elasticity of Demand; Income Elasticity and Cross Price Elasticity of Demand; Elasticity of Supply; Computation and Interpretation of Supply Elasticity; Determinants of Elasticity of Supply.

### 5. Utility Theory: [ILO 5]

The Utility Approach: Basic Assumptions of Utility Approach; Marginal, Average and Total Utility and their Relationship; Marginal Utility and Price; Law of Diminishing Marginal Utility; Law of Equi-Marginal Utility; The Indifference Curve Approach; Basic Assumptions of IC Approach; Characteristics of Indifference Curve; Indifference Curve and Indifference Map; Budget Line and its Properties; Marginal Rate of Substitution and Price Ratio; Price Effect, Income Effect and Substitution Effect; Shape of the Demand Curve for Normal, Inferior and Giffen Commodity Types.

### 6. Theory of Production and Cost: [ILO 6, ILO 7]

Factors of Production; Production Function; Law of Diminishing Returns; Isocosts and Isoquant; Marginal Rate of Technical Substitution; Cost Ratios and Optimization of Production Level; Short-Run Production Function and the Law of Variable Proportion; Economies and Diseconomies of Scale (Internal and External); Long-Run Production Function and the Law of Returns to Scale; Total Product and Marginal Product; Variable and Fixed Costs; Average, Marginal and Total Costs and Shapes of Various Cost Curves; Short-Run and Long-Run Cost Curves; Relationship between Marginal Cost and Price level.

### 7. Market Structure and Determination of Equilibrium Price and Output Levels: [ILO 8]

Definition and Structure of Market; Characteristics of Different Markets; Perfectly Competitive Market and Imperfectly Competitive Markets (Monopoly, Duopoly, Oligopoly and Monopolistic Markets); Determination of Equilibrium Price and Output in Different Markets; Price Discrimination and Distortions; Anti-Trust Laws.

#### 8. Theory of Distribution: Factors of Production and Factor Pricing: [ILO 9]

Wage, Rent, Interest, Profit-Theories of Factor Pricing: Wage Determination According to Neoclassical Theory.

#### **Recommended Textbooks:**

- 1. Mankiw, N. G. Principles of Microeconomics, (CENGAGE Learning)
- 2. Krugman, P. and Wells, R. Microeconomics, (Worth Publishers).

#### **Reference Materials:**

- 1. Samuelson, P. and Nordhaus, W. Economics (McGraw-Hill/Irwin).
- 2. Lipsey, R. G. and Courant, P. N. Microeconomics (Prentice Hall).
- 3. Koutsoyiannis, A. Microecnomics (Palgrave Macmillan).
- 4. Ahuja, H. L. Business Economics (Sultan Chand & Co.).

#### 1203: Management and Organizational Behavior

#### **Course Objectives:**

This course deals with human behavior in organizations and with managerial practices and methods within organizations that facilitate or hamper effective behavior. The course explores factors shaping individual, group, organizational and cultural dynamics, as they pertain to administration and management in organizations. This course will help students to understand that humans and organizations are not functional and quantitative subjects but also behavioral and qualitative one.

### Intended Learning Objectives (ILOs):

Upon completion of this course, students should be able to:

1. Understand the concepts, functions of management and organizational behavior.

- 2. Understand the positive role that business management plays in society through an understanding of history of management, contemporary approaches to management and organizational behavior, an organization's environments, and business' role in fostering corporate social responsibility and ethics.
- 3. Analyze the role manager's play in the planning and decision making, organizing, leading, and controlling process of management, with specific reflection on the individual and organization interface in understanding its concepts and implications on organizational effectiveness.
- 4. Develop ideas on human resources management process and the basics of hiring, development, compensation, performance management and labor relations.
- 5. Understand the nature of the individual–organization relationship; how individual and workplace behavior influences organizational effectiveness; including attitudes, job satisfaction, emotions, personality, values, perception, decision making, and motivational theories.
- 6. Understand group and interpersonal behavior in organizations; including group and team development and managing conflict; leadership, power and politics, negotiations, adapting to change.
- 7. Understand Organizational factors affecting behavior, including reward systems, culture, and organizational design.

## **Detailed Course Contents:**

1. Meaning and Significance of Management and Organizational Behavior: [ILO 1, ILO 2]

An Introduction to Management; Management Functions; Management Skills; The Evolution of Management; Contemporary Management Perspectives, Meaning of Organizational Behavior (OB), Scientific Foundation of OB, OB and Management, Ethics of OB, Levels of OB, Challenges of OB.

## 2. The Environments of Organizations and Managers: [ILO 2, ILO 7]

The Organization's Environments; The Ethical and Social Environment of Management: Individual Ethics, Emerging Ethical Issues, Arguments for and Against Social Responsibility, Managing Social Responsibility, Current Issues in Social Responsibility and Ethics; The Organization's Culture: Importance, Determinants and Managing Organizational Culture.

## 3. Planning and Strategic Management: [ILO 3]

What and Why of Planning; Types of Plans; Objectives; Define Strategic Management; The Strategic Management Process; Corporate Strategies; Competitive Strategies: The Role of Competitive Advantage, Sustaining Competitive Advantage.

## 4. Managing Decision Making: [ILO 3, ILO 5]

The Nature of Decision Making: Decision Making Defined; Types of Decisions; Decision-Making Conditions; Approaches to Decision Making: Rationality, Bounded Rationality, Intuition, Evidence-Based Management, Crowdsourcing; Decision-Making Biases and Errors; Cutting-Edge Approaches for Improving Decision Making; Group and Teams: Forms of Group and Team Decision Making, Advantages & Disadvantages of Group and Team Decision Making, Managing Group and Team Decision-Making Processes.

## 5. Organization Structure and Design: [ILO 3, ILO 7]

The Basic Elements of Organizing: Work Specialization, Departmentalization, Chain of Command, Span of Control, Centralization and Decentralization, Coordination; Traditional Organizational Design: Simple Structure, Functional Structure, Divisional Structure; Options Organizing for Flexibility in the Twenty-First Century: Team Structures, Matrix and Project Structures, The Virtual Organization, Telecommuting, Compressed Work Weeks, Flextime, Job Sharing, The Contingent Workforce.

## 6. Managing Human Resources: [ILO 4]

The Human Resource Management Process: Environmental Context; Attracting Human Resources - Human Resource Planning & Selecting Employees; Developing Human Resources- Training and Development, Performance Appraisal; Maintaining Human Resources- Compensation and Benefits, career planning.

## 7. Organization Change: [ILO 6]

The Nature of Organization Change: Forces for Change, Planned versus Reactive Change; Managing Change in Organizations: Steps in the Change Process, Understanding Resistance to Change, Overcoming Resistance to Change.

## 8. Basic Elements of Individual Behavior in Organizations: [ILO 5]

Understanding Individuals in Organizations: The Psychological Contract, The Person– Job Fit ,The Nature of Individual Differences; Personality: The "Big Five" Personality Traits, The Myers-Briggs Framework, Other Personality Traits at Work, Emotional Intelligence; Attitudes and Job Performance: Job Satisfaction, Job Involvement and Organizational Commitment, Employee Engagement, Attitudes and Consistency, Cognitive Dissonance Theory, Implications for Managers; Perception: Factors That Influence Perception, Attribution Theory, Shortcuts Used in Judging Others, Implications for Managers; Stress and Individual Behavior: Causes and Consequences of Stress, Managing Stress; Types of Workplace Behavior: Performance Behaviors, Withdrawal Behaviors, Organizational Citizenship, Dysfunctional Behaviors.

## 9. Motivating Employees: [ILO 3, ILO 5, ILO 7]

The Nature of Motivation Early Theories of Motivation: Maslow's Hierarchy of Needs Theory, McGregor's Theory X and Theory Y, Herzberg's Two-Factor Theory, Three-Needs Theory; Contemporary Theories of Motivation: Goal-Setting Theory, Reinforcement Theory, Designing Motivating Jobs, Equity Theory, Expectancy Theory; Popular Motivational Strategies: Empowerment and Participation, Using Reward Systems to Motivate Performance.

## 10. Leadership and Influence Processes: [ILO 3, ILO 6]

The Nature of Leadership: The Meaning of Leadership, Leadership and Management, Leadership and Power; Generic Approaches to Leadership: Leadership Traits, Leadership Behaviors; Situational Approaches to Leadership: The Fiedler Model, Hersey and Blanchard's Situational Leadership Theory, Path-Goal Model; Contemporary Views of Leadership: Leader–Member Exchange (LMX) Theory, Charismatic Leadership, Transformational-Transactional Leadership, Authentic Leadership Ethical Leadership, Servant Leadership, Followership; Political Behavior in Organizations: Common Political Behavior, Impression Management, Managing Political Behavior.

## 11. Managing Work Groups and Teams: [ILO 6]

Types of Groups and Teams, Why People Join Groups and Teams Stages of Group and Team Development; Conflict: The Nature of Conflict, Causes of Conflict, Managing Conflict: Stimulating Conflict, Controlling Conflict, Resolving and Eliminating Conflict, Negotiation.

## 12. Basic Elements of Control: [ILO 3]

The Nature of Control: The Purpose of Control, Types of Control, Steps in the Control Process; Tools for Control: Feedforward/Concurrent/Feedback Controls, Financial Controls, Information Controls, Balanced Scorecard, Benchmarking of Best Practices; Managing Control in Organizations: Characteristics of Effective Control, Resistance to Control, Overcoming Resistance to Control.

## **Recommended Textbooks:**

- 1. Griffin, W. R. Management, (Cengage Learning).
- 2. Robbins, S. P. and Coulter, M. Management, Global Edition. (Pearson).
- 3. George, J. M. and Jones, G. R. *Understanding and Managing Organizational Behavior*. (Prentice Hall).
- 4. Robbins, S. P. and Judge, T. A. Organizational Behavior, (Prentice Hall).
- 5. Davis, K. Organization Behavior: Human Behavior at Work. (McGraw-Hill).

## 1204: Mathematics for Business Decisions-II

## **Course Objectives:**

This course is designed to develop an understanding of concepts, theory and models of mathematics used in the area of business and economics. Students will be well-equipped with mathematical tools used in the analysis of decision-making business problems.

## Intended Learning Objectives (ILOs):

Upon completion of this course, students should be able to:

- 1. Understand linear Matrices and Determinants concept and apply them in solving related business problems.
- 2. Understand Differential and Integral Calculus and apply them in solving related business problems.
- 3. Understand Partial Differentiation and apply them in solving related business problems.
- 4. Understand Differential Equation and apply them in solving related business problems.

## **Detailed Course Contents:**

## 1. Matrices and Determinants: [ILO 1]

Introduction to Matrices; Types of Matrices; Arithmetic Operations (Addition, Subtraction and Multiplication) on Matrices. Markov Process (chain) and its Business Applications.

Inverse Matrix; Solution of Simultaneous Linear Equations using Inverse Matrix. Leontief Input-Output Model and its Application.

Introduction to Determinants; Properties of Determinants; Operations on Determinants; Crammer's Rule to Solve a System of Linear Equations. Application Problems in Business and Economics.

## 2. Differential Calculus: [ILO 2]

Definition of Differentiation (or Ordinary Differentiation); Concepts and Geometric Interpretation of Differentiation. Differentiation using Definition and Basic formulae of Differentiation. Differentiation of Algebraic, Exponential, Logarithmic, Trigonometric and Transcendental Functions. Differentiation of Composite Functions, Parametric Functions and Implicit Functions. Successive Differentiation.

Increasing and Decreasing of a Function; the Stationary/Critical Points; Maxima and Minima of a Function; Conditions and Determination of Maxima and Minima; Global and Local Maximum or Minimum of a Function; Point of Inflexion; Application Problems in Business and Economics.

## 3. Integral Calculus: [ILO 2]

Introduction to Integration. Basic Rules (formulae) of Integration. Indefinite Integral and Indefinite Integral. Calculation of Area bounded by Curves and Figures; Analysis of Total Concept by Integration. Application Problems in Business and Economics

## 4. Partial Differentiation: [ILO 3]

Concepts of Partial Differentiation (or multivariate calculus). Partial differentiation of function with two independent variables. Maximum and minimum of two variables function (non-constrained optimization). Optimization using Lagrange's Multiplier (constrained optimization) of two variables functions (utility function, cost function, Cobb-Douglas production function etc.).

## 5. Differential Equation: [ILO 4]

Introduction and Definition of Differential Equation. Order and Degree of Differential Equations. Solution of First Order and First-Degree Differential Equation. Verification of Solutions. Differential Equations of the Second Order with Constant Coefficients. Application of Differential Equations in the Problems of Business and Economics.

## **Recommended Textbooks:**

- 1. Bowen, E. K. Mathematics with Applications in Management & Economics (R. D. Irwin).
- 2. Brown, R. L. Steve Kopp and P.Zima. *Mathematics for Finance* (McGraw-Hill Ryerson).
- 3. Sancheti, D.C. and Kapoor, V.K. Business Mathematics (Sultan Chand and Sons).

#### 1205: Bangladesh Studies

#### **Course Objectives:**

The objective of this course is to develop an understanding of physical, ecological and geographical aspects as well as the historical background of Bangladesh. The course aims to equip students with the knowledge of political, administrative and legal environment of Bangladesh and help them know about the society, economy and macroeconomic environment of Bangladesh.

## **Intended Learning Objectives (ILOs):**

Upon completion of this course, students should be able to:

- 1. Understand the geography, history and economy of Bangladesh.
- 2. Socio-political, administrative and legal system of Bangladesh.
- 3. The Liberation War of Bangladesh 1971 and its backdrop.
- 4. Relationship of Bangladesh with foreign countries.

## **Detailed Course Contents:**

## 1. The Geography and the Economy of Bangladesh: [ILO 1]

Physical features of Bangladesh: Location, Geography and Climate; People and Races; Language, Territory and History; The Economy: The Pattern of Agriculture, Mineral Resources and Industrial Setup in Bangladesh; Physical Infrastructure of Bangladesh.

## 2. The History of Bangladesh: [ILO 1, ILO 3]

Bangladesh during the Muslim Rule (1704-1755), British Rule (1756-1946) and Pakistani Rule(1947-1971); The Language Movement of 1948-52: The suppression of Bengali Culture and Language; The Six-Point Program, 1966; Mass Upsurge, 1969; The Elections of 1970 and its Aftermath; Pakistan's Strategy and the Liberation War: The Birth of Bangladesh.

## 3. Political, Administrative and Legal Environment of Bangladesh: [ILO 2]

Different Political Regimes of Bangladesh; Administrative Structure in Bangladesh; Forms of Government and State Mechanism: Executive, Legislature and Judiciary; Main Features of the Constitution and its Amendments.

## 4. Macroeconomic Environment and International Relationship: [ILO 2, ILO 4]

Social and Economic Structure of Bangladesh; Macroeconomic Environment of Bangladesh; Power, Energy and the Environment of Bangladesh (Impact of Climate Change);Social Problems of Bangladesh; Five Year Plans, Bangladesh Delta Plan 2100, Different Mid and Long Term Plans of Bangladesh : Five Year Plans, Bangladesh Delta Plan 2100; Foreign Policy of Bangladesh (Foreign Relation to India, USA, Myanmar, China, Russia, EU, Middle East etc.)

## **Recommended Textbooks:**

- 1. Muhith, A. M. A. Bangladesh: Emergence of a Nation (University Press Ltd.).
- 2. Islam, S. (Ed.). *History of Bangladesh (Economic, Socio-cultural and Political): 1704-1971* (The Asiatic Society of Bangladesh).

## **References Materials:**

- 1. Rashid, H. A. The Geography of Bangladesh (University Press Ltd.).
- 2. Islam, M. Constitutional Law of Bangladesh (Mullick & Brothers).
- 3. Ministry of Finance, GOB. Bangladesh Economic Review.
- 4. Planning Commission, GOB. Five-Year Plans of Bangladesh.

## SECOND YEAR FIRST SEMESTER

## 2101: Advanced Financial Accounting-I

## **Course Objectives:**

The objective of this course is to enhance students' understanding of the recognition, measurement and disclosure issues relating to revenues, expenses, liabilities and equities that are reported in the interim and annual financial statements. This course is also designed to provide the students with the knowledge of additional reporting issues such as earnings per share, events after the reporting period, related party disclosures and accounting for partnership business.

## Intended Learning Outcomes (ILOs):

Upon completion of the course, students should be able to:

- 1. Understand the fundamental concepts of revenue and expense recognition and apply the revenue recognition process to major revenue generating transactions.
- 2. Describe the nature, valuation and reporting of current liabilities, provisions and contingencies.
- 3. Explain the accounting for issuance and extinguishment of non-current liabilities.
- 4. Elucidate the accounting and reporting of different components of equity.
- 5. Compute and interpret basic and diluted earnings per share information.
- 6. Comprehend the recognition, measurement and disclosure of events after the reporting period.
- 7. Identify a related party and evaluate the impact of related party transactions on different elements of financial statements.
- 8. Prescribe the form and minimum contents of interim financial statements.
- 9. Prepare partnership accounts.

## **Detailed Course Contents:**

## 1. Revenue and Expense: Recognition, Measurement and Disclosure: [ILO 1]

Definition of Revenue and Expense, Recognition and Measurement of Revenue and Expense, Five-step Revenue Recognition Process, Applying Five-step Process to Major Revenue Recognition Issues, Revenue Recognition for Long-term Construction

Contracts, Long-term Contract Losses, Revenue Recognition for Franchises, Expense Recognition Process, Presentation and Disclosure Requirements relating to Revenue and Expense, IFRS 15: Revenue from Contracts with Customers.

## 2. Current Liabilities, Provisions and Contingencies: [ILO 2]

Definition of Liability, Criteria for Classification of Liability, Accounting for Major Types of Current Liabilities, Definition of Provision, Recognition and Measurement of Provision, Accounting for Common Types of Provision, Contingent Liabilities and Assets, Presentation and Disclosure Related to Current Liabilities, Provisions and Contingencies. IAS 37: Provisions, Contingent Liabilities and Contingent Assets.

## 3. Non-Current Liabilities: [ILO 3]

Nature and Types of Non-Current Liabilities, Types and Issuance of Bonds, Valuation and Accounting for Bonds Payable, Cost of Issuing Bonds, Accounting for Long-term Notes Payable and Mortgage Payable, Extinguishment of Non-Current Liabilities, Presentation, Disclosure and Analysis of Non-Current Liabilities. IFRS 9: Financial Instruments

## 4. Owner's Equity: [ILO 4]

Concept of Equity in Corporate Entities, Definition of Equity, Components of Equity, Issuance of Ordinary and Preference Shares, Reacquisition of Shares or Treasury Shares, Purchase and Sale of Treasury Shares, Retiring Treasury Shares, Accumulated Other Comprehensive Income, Retained Earnings, Dividend Policy and Types of Dividends, Share Dividend and Share Split. Presentation and Analysis of Equity. IFRS 9: Financial Instruments

## 5. Earnings per Share: [ILO 5]

Meaning and Use of Earnings per Share (EPS) Information, Simple and Complex Capital Structure, Determining Weighted Average Number of Common Share Outstanding, Computing Basic Earnings per Share, Meaning of Diluted Earnings per Share, Effect of Convertible Securities, Options, Warrants and Contingently Issuable Shares on Diluted Earnings per Share, Antidilution Effect, Computing Diluted Earnings Per Share, Presentation and Disclosure of Earnings per Share. IAS 33: Earnings Per Share.

## 6. Events after the Reporting Period: [ILO 6]

Definition of Events after the Reporting Period, Authorization of Financial Statements for Issue, Adjusting Events and Non-Adjusting Events, Disclosures Related to Events after the Reporting Period, IAS 10: Events after the Reporting Period.

## 7. Related Party Transactions: [ILO 7]

Definition of a Related Party, a Related Party Transaction, Close Family Member, Compensation and Key Management Personnel, Purpose of Related Party Disclosures, Detail Disclosure Requirement Relating to a Related Party, IAS 24: Related Party Disclosures.

## 8. Preparation of Interim Financial Statements: [ILO 8]

Definition and Use of Interim Financial Statements, Minimum Components of Interim Financial Statements, Form and Content of Interim Financial Statements, Disclosure of Significant Events and Transactions, Interim Reporting Period, Accounting Policies and Estimates for Preparation of Interim Financial Statements, IAS 34: Interim Financial Reporting.

## 9. Accounting for Partnership: [ILO 9]

Partnership Business and its Characteristics, Form and Contents of Partnership Accounts, Accounting for Changes in a Partnership Structure, Admission and Retirement of Partners, Valuation of Goodwill, Liquidation of Partnership Business, Conversion of Partnership to a Company.

## **Recommended Textbooks:**

1. Kieso, D. E., Weygandt, J. J. and Warfield, T. D. *Intermediate Accounting: IFRS Edition.* (John Wiley & Sons, Inc.)

#### **Reference Materials:**

- 1. Relevant International Accounting Standards and International Financial Reporting Standards
- 2. Annual Report of Listed Companies for Understanding Financial Statements

## **2102: Macroeconomics**

#### **Course Objectives:**

The objective of this course is to give students a background of basic macro-economic theories, concepts and indicators and their relevance to different policy actions. The course is designed to provide students the tools to analyze how macroeconomic indicators like national income, consumption, savings and investments are determined and how macro policies such as fiscal, financial and trade policies are related to economic management.

## Intended Learning Outcomes (ILOs):

Upon completion of the course, students should be able to:

- 1. Understand the concept of macroeconomics and its relevance to business decision making.
- 2. Measure national income (NI) using the income and expenditure approaches.
- 3. Understand consumption function, MPC & APC and their relationship.
- 4. Understand money and analyze Keynesian approach to demand for money, develop a model of money supply under Fractional Reserve Banking (FRB) system.
- 5. Understand unemployment and analyze the causes of unemployment.
- 6. Understand specific roles and functions of monetary and fiscal policy.
- 7. Know about aggregate demand & aggregate supply and demand shocks & supply shocks and how to stabilize demand shock & supply shock.

- 8. Develop IS curve and LM curve using Keynesian cross and Liquidity preference theory and analyze the impact of fiscal policy and monetary policy on short run equilibrium of the economy.
- 9. Distinguish between open economy and closed economy.
- 10. Analyze policies influencing trade balance and exchange rate (NER & RER)

## **Detailed Course Contents:**

#### 1. Introduction to Macroeconomics: [ILO 1]

Definition of Macroeconomics; Macroeconomic Variables; Importance and Relevance of Macro-Economics for Business Students.

## 2. National Income: [ILO 2]

National Income (NI) Concepts: GNP, NNP, Nominal GDP, Real GDP, GDP Deflator; Consumer Price Index; Measuring Income Using Expenditure Approach and Income Approach; Intermediate Goods and Value Added;

## 3. Theories of Consumption, Savings & Investment: [ILO 3, ILO 6]

Theories of Consumption; Savings and Investments-Keynesian Development; Consumption Function; Autonomous Consumption and Induced Consumption; Marginal Propensity to Consume; Average Propensity to Consume; MPC and APC and Their Relationship; Savings Function-Paradox of Savings; Investment: Autonomous and Induced; Interest Rate and Equilibrium in the Financial Market; The Effect of Fiscal Policy on Interest Rate and Investment.

## 4. Theory of Money: [ILO 4]

Definition of Money; Function of Money; Quantity Theories of Money; Money Demand; Keynesian Approach to Demand for Money: Transaction, Precautionary and Speculative Demand for Money; Money Supply; Fractional Reserve Banking System; A Model of Money Supply; Neutrality of Money; Digital Currency.

## 5. Monetary Policy and Inflation: [ILO 4, ILO 6]

Definition Monetary Policy and Fiscal Policy; Importance of Monetary Policy as an Instrument of Economic Management; Causes and Types of inflation; The Instruments of Monetary Policy; Monetary Policy During Inflation, Deflation, Stagflation and Different Phases of Business Cycle.

## 6. The Open Economy: [ILO 6, ILO 9, ILO 10]

International Flow of Capital and Goods; Trade Balance; Saving and Investment in a Small Economy; Capital Mobility and the World Interest Rate; How Policies Influence Trade Balance; Fiscal Policy at Home and Abroad; Nominal and Real Exchange Rate; The Determinants of Real Exchange Rate; The Determinants of the Nominal Exchange Rate.

## 7. Unemployment: [ILO 5]

Definition of Unemployment; Structural Unemployment and Frictional Unemployment; Natural Rate of Unemployment; Full Employment.

## 8. Business Cycle Theory: [ILO 7]

Introduction to economic fluctuations; Time Horizons in Macroeconomics; Short Run and Long Run; The Model of Aggregate Demand and Aggregate Supply; The Difference in Aggregate Supply Curve in the Short Run and in the Long Run; Shocks to Aggregate Supply and Demand; Stabilization Policy.

## 9. Goods Market, Money Market, and IS-LM Model: [ILO 6, ILO7, ILO 8]

Keynesian Cross Model; Fiscal Policy; Government Purchase Multiplier and Tax Multiplier; Deriving IS Curve; Fiscal Policy and Shift of IS Curve; Interpretation of IS Curve; Money Market and LM Curve; Deriving LM Curve; The Theory of Liquidity Preference; The Use of Monetary Policy; The Shift of LM Curve; Fluctuations with the IS-LM Model; The Interaction Between Monetary and Fiscal Policy.

## **Recommended Textbook:**

1. Mankiw, N. G. Macroeconomics, (Worth Publishers).

## **References Materials:**

- 1. Samuelson, P. and Nordhaus, W. Economics (McGraw-Hill/Irwin).
- 2. Dornbusch, R., Fischer, S. and Startz, R. Macroeconomics (McGraw-Hill/Irwin).
- 3. Blanchard, O. Macroeconomics (Prentice Hall).
- 4. Shapiro, E. Macroeconomic Analysis (Thomson Learning).

## 2103: Programming Language and Database Management

## **Course Objectives:**

The objective of this course is to introduce visual tools for programming and basic concepts of programming languages so that student can develop their own software. Moreover, students will be familiar with the common and contemporary business programming languages along with their applications in real-life situations.

## Intended Learning Outcomes (ILOs):

Upon completion of this course, students should be able to:

- 1. To understand the basic knowledge of Programming languages.
- 2. To understand Python programming language.
- 3. To be able to implement Python programming in the lab.
- 4. To understand the basics of Database Management Systems.
- 5. To understand the basics of Database Management Systems (DBMS).
- 6. To be able to implement DBMS in the lab.

## **Detailed Course Contents:**

## Theory (50%) and Practical (50%)

## 1. Introduction [ILO 1]

Introduction to Programming Languages; Steps in programming; Algorithm; Pseudocode; Flowcharts; Software Development Lifecycle.

## 2. Programming Using Python: [ILO 2, ILO 3]

- 2.1 Introduction to Python.
- 2.2 Variable; Arithmetic; Using print.
- 2.3 Python Data Types: Numeric types, String, Booleans
- 2.4 Input from User.
- 2.5 Python Operators, Expression
- 2.6 If ... Else
- 2.7 Loops: while loop, for loop
- 2.8 Arrays: Uses of Arrays, Array from existing data, array attributes, array Operators,
- 2.9 Built-in functions
- 2.10 Function: Define and using the function, Python standard library, Scope rules, Default parameter value.
- 2.11 Sequences, List and Tuples
- 2.12 Dictionaries and Sets: Create dictionary, Dictionary operations, Dictionary methods keys and values, Working with Set
- 2.13 Using NumPy: Array from existing data, array attributes, array Operators, NumPy methods
- 2.14 Introduction to data analysis using data files.

## 3. Introduction to Database: [ILO 4]

Data models; Entity; Relationship model; Relational model; Mapping cardinalities; Keys.

## 4. Relational Databases: [ILO 5, ILO 6]

- 4.1 Relational Database Design: First Normal Form; Functional Dependencies; Boyce-Codd Normal form; third Normal form; Fourth Normal form.
- 4.2 SQL: Background, Basic structure, set operations, Aggregate functions, Null values, Nested sub-queries, Views, Complex queries, Modification of the database, Joined relations, Data-definition language, Embedded SQL, Dynamic SQL, Other SQL features.
- 4.3 Other Relational Languages: Query-by-Example, User Interfaces and Tools.

**Practical Guideline:** For programming language, Python Programming tools will be used. For the database part, SQLite or MySQL DBMS is preferred.

Criteria	Allocated Marks	<b>Result Segments</b>
Mid Term / In-course Examination-1 (Theory)	15	Continuous
Mid Term / In-course Examination-2 (Practical in	15	Assessment
Lab)		(40%)
Quizzes/Term Paper/Assignments/Class Attendance	10	
Semester Final (Theory)	30	Final (60%)
Semester Final (Practical in Lab)	30	

## Mark Distribution for this Course:

Total 100
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## **Recommended Textbooks:**

- 1. Laudon, K. C. and Laudon, J. P. *Management Information Systems: Managing the Digital Firm* (Prentice Hall).
- 2. Silberschatz, Korth and Sudarshan. Database System Concepts.
- 3. Deitel and Deitel. Intro to Python for Computer Science and Data Science (Pearson).

## **References Materials:**

- 1. Sinha, P.K. and Sinha, P. Computer Fundamentals (BPB Publications)
- 2. Ozoemena, S. Python for Beginners: Learn Python Programming with No Coding Experience in 7 Days (Santos Ozoemena)

#### 2104: General Science and Environment

## **Course Objectives:**

The objective of this course is to give some basic concepts of matter of earth, energy, chemistry and issues of environmental chemistry which we see and use in our day-to-day life. The outcome of this course is to develop certain abilities such as ability to sense a problem, organize and interpret, analyze, generalize and predict.

## Intended Learning Outcomes [ILOs]:

Upon successful completion of this course, students will be able to:

- 1. Develop a scientific attitude in students.
- 2. Acquire scientific knowledge of physical facts and concepts.
- 3. Introduce the fundamental concepts of Chemistry and its significance in an industrial process.
- 4. Teach the students basic knowledge of environmental chemistry, such as chemistry of atmosphere, hydrosphere, and biosphere.
- 5. Teach the student how to apply basic theories and methods of chemistry to study the environmental issues caused by chemical substances (pollutants).
- 6. Provide the students with broad and strong knowledge base for solving scientific problems.

## **Detailed Course Contents:**

## 1. Speed, Velocity and Acceleration: [ILO 1, ILO 2, ILO 6]

Scalar Quantity or Scalar and Vector Quantity or Vector; Distance and Displacement; Speed; Average Speed and its Types; Velocity; Average Velocity and its Types; Mean Velocity; Acceleration and its Types; Equations Uniformly Accelerated Motion; Graphs Relating to Motion and their Uses; Laws of Falling Bodies (Gallileo Galilei).

## 2. Newton's Laws of Motion: [ILO 1, ILO 2, ILO 6]

Inertia and Force; Fundamental Forces; Momentum; Newton's Laws of Motion; Explanation and Derivation of Three Laws; Motion of a Rocket; Principle of Conservation of Momentum; Examples of Principle of Conservation of Momentum; Friction; Kinds of Friction; Advantages and Disadvantages of Friction; Rolling Friction, and Fluid Friction; Coefficient of Friction; Nature of Friction; Brakes Lubrication; Air Lubrication-Further Developments.

## 3. Work, Energy and Power: [ILO 1, ILO 2, ILO 6]

Work and its Unit; Measurement of Work; Zero Work; Gravitational Work; Energy and its Unit; Classification of Energy; Kinetic Energy and Potential Energy; Measurement of Kinetic and Potential Energy; Transformation of Energy; Dissipation of energy; Efficiency; Conservative and Non-conservative Force; Power and its Unit; To Measure Personal Power Internal Energy; Heat Energy; Nuclear Energy; Sound Energy; Solar Energy; Light Energy; Magnetic Energy; Atomic Energy; Electromagnetic Energy; Chemical Energy; Mechanical Energy.

## 4. Gravitation: [ILO 1, ILO 2, ILO 6]

Gravitational Force and Gravity; Newton's Law of Gravitation; Units and Dimension of Gravitational Constant; Acceleration due to Gravity; Mass and Density of the Earth; Mass and Weight, Variation of Weight of a Body; Centripetal Force; Relation between Total Gravitational Force and Weight; Weightlessness; Artificial Weight in a Space Station; Action and reaction Forces; Simple Pendulum and Measurement of g–distance Moved by a Freely Falling Body related to Time of Fall to Measure g by the Use of Centi-Second Timer; Natural and Artificial Satellites; Use of Artificial Satellite, Strength of Materials elasticity- Hook's law.

## 5. Some Molecular Properties of Matter: [ILO 3]

Matter and States of Matter, Causes of Difference of the States of Matter, Gaseous State, Laws of Gases, Absolute Temperature and Absolute Zero Temperature, Ideal and Real Gas, Diffusion of Gases, Surface Tension, Molecular Explanation of Surface Tension, Adhesion and Cohesion- Capillary Attraction, Kinetic Theory of Matter, to Measure the Approximate Length of a Molecule, Industrial Applications of Metallurgical Studies.

## 6. Atoms: the Big Idea: [ILO 3, ILO 6]

Atoms and Molecules; Brownian Movements;Different Atomic Theory(How Ideas of Atom are Developed);Atoms and its Fundamental Particles(the Inside Theory of Atom);Atomic Number; Atomic Mass; Relation among Proton; Neutron and Electrons; Isotope, Isobar and Isotones; Quantum Number (How Electrons are Arranged).

## 7. Chemical Reactions, Equations and Amounts: [ILO 3, ILO 6]

Chemical Equations; the Masses of Atoms-Percentages Composition from Molecular formula; Empirical Formula and Molecular formula; Determination of the Empirical Formula of a Compound; Equations for Chemical Reactions; Electrolytic Conductance; Non Electrolytic Conductor; Electrolysis, Industrial Uses of Electrolysis.

## 8. Chemical Bond: [ILO 3, ILO 6]

Chemical Bond; Nature of Bond Energy; Why Compounds Form; Causes of Chemical Combination; Types of Chemical Bond; Ionic Bond; Covalent Bond; Metallic Bond and their Properties; Metals- more Giant Structures.

## 9. Energy Changes and Reversible Reactions: [ILO 3, ILO 4, ILO 5]

Chemical Equilibrium; Exothermic and Endothermic Reactions; Explaining Energy Changes; Reversible and Irreversible Reactions; Shifting the Equilibrium; Making the Ammonia in Industry; Fertilizers-the Pros and Cons of Fertilizers.

## 10. Useful Materials from Crude Oil: [ILO 3, ILO 6]

Crude Oil; Separating Oil into Fractions; Cracking Hydrocarbon; the Alkaline and Alkenes; Polymerization and Plastics; Polythene-Oil and Environment.

## 11. Chemistry and the Environment: [ILO 4, ILO 5]

Carbon Cycle; Nitrogen Cycle; Global Warming; Ozone/ Greenhouse effect-the Ozone Hole; the Greenhouse Effect; Air Pollution; Land Pollution; Water Pollution; Drinking Water; Nitrates in Drinking Water; Eutrophication; Burning Fuels and the Air-Burning the Coal; Burning Petrol and Diesel Oil; Getting Rid of the Rubbish; Landfill Sites; Cars of Tomorrow-Car Bodies; Emissions, Safety Features; Home of the Future-the Shell-Walls; the Roof; Inside the House.

## **Recommended Textbooks:**

1. Abbott, A.F. *Physics* (Heinemann Educational).

- 2. Chang, R. General Chemistry (McGraw-Hill Companies).
- 3. De, A.K. Environmental Chemistry (New Age International Publishers).

## 2105: Business Statistics-I

## **Course Objectives:**

This course is intended to provide students with an understanding of the data, basic terminology of statistics, and methods of statistical tools, techniques for descriptive analysis in business, and economic data. It also covers the concepts of probability, sampling techniques, correlation, simple, and multiple regression analysis to forecast the future. At the end of the course, students will be acquainted with the theoretical and practical concepts, tools and techniques of basic statistics that will develop their ability to deal with quantitative issues in business and economics, analyze and interpret them and forms the basis of decision-making in business.

## Intended Learning Outcomes (ILOs):

At the completion of this course, the students should be able to:

- 1. Get an appropriate understanding of basic Statistics and its applications in Business and Economics.
- 2. Develop the knowledge about different key terms of Statistics and the way of presenting data in a tabular and graphical form.

- 3. Learn different methods to center all the observations of a data set.
- 4. Understand different techniques of finding the state of getting dispersed or spread of a dataset.
- 5. Get into the idea about the asymmetry and skewness of a distribution.
- 6. Find out the way to quantify the strength of relationship of two or more variables.
- 7. Estimate the significance of some explanatory variable on the dependent variable.
- 8. Learn the concepts of Probability and Bayesian approaches to solve business problems.
- 9. Build an idea relating to survey design and analysis of survey data in the area of business, and economics.

## **Detailed Course Contents:**

1. Introduction to Statistics: [ILO 1]

Concepts of Business Statistics; Scope, Importance and Limitations of Statistics; Application of Statistics in Business and Economics; Types of Statistics: Descriptive and Inferential Statistics.

## 2. Collection, Organization and Presentation of Statistical Data: [ILO 2]

Concepts of Population and Sample; Variable and its Types; Meaning of Data; Types of Data; Sources of Data; Methods for Data Collection; Questionnaire Design; Requisites of a Good Questionnaire; Variable; Classification of Data; Types of Classification; Tabulation and its Rules; Data array; Stem and leaf Plot; Advantages of Presenting a Data in a Tabular Form; Types of Tabulation; Frequency Distribution; Construction of a Frequency Distribution; Graphical Presentation of Qualitative and Quantitative Data; Types of Diagrams (Bar Diagram, Pie Diagram, Pareto Diagram); Types of Graphs (Histogram, Frequency Polygon, Frequency Curve, Ogive, Cumulative Frequency Curves, Relative Cumulative Frequency Curves).

## 3. Measures of Central Tendency: [ILO 3]

Definition of Central Tendency; Characteristics of a Good Measure of Central Tendency; Different Measures of Central Tendency with its Properties, Merits and Demerits (Arithmetic, Median, Mode, Geometric Mean, Harmonic Mean); Relationships among Different Measures of Central Tendency; Weighted Mean; Quadratic Mean; Other Measures of Location (Quartiles, Deciles, and Percentiles).

## 4. Measures of Dispersion: [ILO 4]

Concepts of Dispersion and its Significance; Characteristics of a Good Measure of Dispersion; Types of Dispersion; Absolute Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation; Chebyshev's Theorem; Relative Measures of Dispersion: Coefficient of Range, Coefficient of Quartile Deviation, Coefficient of Mean Deviation, Coefficient of Variation.

## 5. Measures of Skewness and Kurtosis: [ILO 5]

Moments: Moments from Ungrouped and Grouped Data; Relation between Central and Raw Moments; Skewness and its Types; Different Measures of Skewness;

Absolute Measures of Skewness; Relative Measures of Skewness; Coefficient of Skewness Based on Moments; Kurtosis and its Types; Different Measures of Kurtosis.

## 6. Correlation Analysis: [ILO 6]

Meaning and Significance of Correlation; Different Types of Correlation: Simple Correlation Coefficient; Multiple Correlation Coefficient; Partial Correlation Coefficient; Methods for Studying Correlation (Scatter Diagram Method, Karl Pearson's Correlation Coefficient, Rank Correlation Coefficient), Coefficient of Correlation, Properties of Coefficient of Correlation; Coefficient of Determination.

## 7. Regression Analysis: [ILO 7]

Meaning of Simple Linear Regression Model; Regression lines and Equation; Assumptions of Simple Linear Regression; Methods for Estimating Simple Linear Regression Model or Parameters; The Method of Least Squares; Coefficient of Determination; Inferences about Parameters of the Model; Using the Model for Estimation and Prediction; Relationship between Correlation Coefficient and Regression Coefficient; Properties of Regression Coefficient; Meaning of Multiple Linear Regression Model; Assumptions of Simple Linear Regression; Inferences about Parameters of the Model.

## 8. Probability Theory: [ILO 8]

Probability and its different Approaches; Various Terms in Probability (Random Experiment, Event, Mutually Exclusive Events, Equally likely Events, Dependent and Independent Events, With and Without Replacement); Additive and multiplicative Laws of Probability; Joint Probability; Marginal Probability; Conditional Probability; Bayes's Theorem and its Application.

## 9. Sampling and Socio-Economic Surveys: [ILO 9]

Concepts of Census and Sample Survey; Advantages of Sampling over Census; Limitation of Sample Survey; Steps in Conducting Socio-economic Survey; Sampling and Non-sampling Error; Methods of Random Selection: Simple Random Sampling, Stratified Random Sampling, Systematic Sampling, Multistage Sampling, Quasi Random Sampling, Simple Cluster Sampling, Multistage Cluster Sampling, Methods of Random Selection: Quota Sampling, Purposive Sampling, Convenience Sampling, Snowball Sampling; Steps in Conducting Socio-economic Survey; Sampling and Nonsampling Error.

## **Recommended Textbooks:**

- 1. Levin, R. I. and Rubin, D. S. Statistics for Management (Prentice Hall).
- 2. Gupta, S. P. and Gupta, M. P. Business Statistics (Sultan Chand & Sons).

## **References Materials:**

- 1. Mansfield, E. Statistics for Business and Economics (W. W. Norton & Company).
- 2. Mason, R. and Lind, D. Statistical Techniques in Business and Economics (McGraw-Hill).
- 3. Gupta, S. P. Statistical Methods (Sultan Chand & Sons).

## SECOND YEAR SECOND SEMESTER

## 2201: Advanced Financial Accounting-II

## **Course Objectives:**

The objectives of this course are to make the students acquainted with the accounting aspects of Business Combination, investment in Association and Joint Ventures, Financial Instruments, Company Liquidation, Segment Reporting and Related Party Disclosure. This course will provide students sound and in-depth technical and conceptual knowledge to prepare the various financial statements like separate financial statements, consolidated financial statements of the company and liquidator's Statements in case of company liquidation.

## Intended Learning Outcomes (ILOs):

Upon completion of the course, students should be able to:

- 1. Explain the basic principles regarding the business combination-related issues.
- **2.** Understand the key regulations regarding the preparation of separate and consolidated Financial Statements.
- **3.** Understand the basic principles regarding recognition, measurement and de-recognition of financial instruments.
- **4.** Identify the accounting issues regarding the recognition and de-recognition of Financial Assets and Liabilities.
- 5. Understand the issues discussed in the Bankruptcy Act, 1997 and its implications on preparing the liquidator's statement for liquidation; and
- 6. Recognize the importance of segment reporting and disclosure requirements.

## **Detailed Course Contents:**

- 1. Accounting for Interests in Subsidiaries: [ILO 1, ILO 2]
  - 1.1 Group Accounts–Basic Principles: Context for Group Accounts; Single Entity Concept; Control and Ownership; Nature of Business Combinations; Identifying the Acquirer; Measuring the Cost of a Business Combination; Allocating the Cost of Business Combination; Goodwill Calculation; non-controlling Interest; Application of IAS 27 for preparation of separate Financial Statements; Disclosure Requirements. (IAS 27, IFRS 3, IFRS 10 & IFRS 12).
  - **1.2 Group Accounts–Consolidated Statement of Financial Position:** Goodwill Calculation; Preparation of Consolidated Statement of Financial Position; Issues related to Mid-year Acquisitions; Adjustments of Intra-Group Balances; Treatments for Unrealized Intra-Group Profit; Fair Value Adjustments; Other Adjustments related for Consolidation.

**1.3 Group Accounts–Consolidated Statement of Financial Performance and Statement of Changes in Equity:** Preparation of Consolidated Financial Performance; Adjustments for Intra-Group Transactions and Unrealized Profit; Issues related to Mid-year Acquisitions; Issues related to Dividend; Other Consolidation Adjustments; Preparation of Consolidated Statement of Changes in Equity.

## 2. Accounting for an Entity's Interests in Other Entities: [ILO 1, ILO 2]

Meaning of Associate; Criteria for determining significant influence; Use of equity method for investment in Associates; Exemptions for applying the Equity Method; Discontinuing the use of the equity method; Accounting for impairment losses; Preparation of Statement of Profit or Loss and other Comprehensive Income under equity method; Accounting treatments for Associate's losses; Accounting treatment for different transactions between a group and its associate; Disclosure requirements as per IFRS 12.

Introduction to Joint arrangement; Meaning of Joint Control; Types of Joint Arrangement; Structure of Joint Arrangement; Accounting for acquisitions and sales on interests in joint operations; Impairment loss in case of application of Equity method in Joint Venture; Preparation of Financial Statements of parties to a Joint Arrangement (IFRS 11); Disclosure requirements as per IFRS 12. (IAS 28, IFRS 10, IFRS 11 & IFRS 12)

## 3. Financial Instruments: [ILO 3, ILO 4]

Meaning of 'Financial Instrument'; Classification of Financial Assets; Classification of Financial Instruments as Liability or Equity; Compound Financial Instrument; Recognition and Derecognition of Financial Assets and Liabilities; Measurement of Financial Assets and Liabilities; Considerations on Fair Value Measurement; Impairment of Financial Assets; Reclassification of Financial Assets; Accounting treatment for gain or loss on Financial Assets and Liabilities; Ethical and Judgement Issues; Presentation and Disclosure Requirements as per IAS 32 and IFRS 7, (IAS 32, IFRS 7, IFRS 9 & IFRS 13)

## 4. Liquidation and Bankruptcy: [ILO 5]

Individual; Partnership Firms and Company; Bankruptcy Act 1997; Winding up in Insolvency and by the Court; Voluntary Winding Up; Powers of the Liquidators; Liquidator's Accounts, Proof of Debts; Priority of Payment of Debts; Accounting for Liquidation and Bankruptcy.

## 5. Operating Segments: [ILO 6]

Meaning of Segment reporting; Importance of Segment Reporting; Managerial approach to identify and report Operating Segments, Disclosure Requirements; IFRS 8.

## **Recommended Textbooks:**

- 1. Beams, F. A., Anthony, J. H., Bettinghaus, B. and Smith, S. Advanced Accounting. (Pearson).
- 2. Picker, R., Leo, K., Radford, J., Alfredson, K., Pactor, P. and Wise, V. Australian Accounting Standards (John Wiley & Sons Australia, Ltd.).

- 3. Tan, P. and Lee, P. Advanced Financial Accounting: An IAS and IFRS Approach. (McGraw-Hill).
- 4. Christensen, T., Cottrell, D. and Budd, C. *Advanced Financial Accounting*. (McGraw-Hill)
- 5. ICAB Manual, Financial Accounting and Reporting, Professional Level, ICAB.

#### **References Materials:**

1. Bankruptcy Act, 1997.

#### 2202: Financial Management

## **Course Objectives:**

The basic objective of this course is to provide students with a sound theoretical knowledge on principles and practices of business finance where a student will get proper idea about financial management in an organizational perspective.

#### **Intended Learning Outcomes (ILOs):**

Upon successful completion of this course, students will be able to:

- 1. Describe the financial environment within which organization operate, role of financial management within an organization and critically evaluate the financial objectives of financial manager.
- 2. Describe the role and function of the main financial institutions and markets that facilitate financing.
- 3. Explain the basic concept of time value of money and its impact on the financial manager's decision process.
- 4. Explain the cost of different financing sources a company may use while financing their capital requirements.
- 5. Describe the concepts of security valuation based on different valuation approaches/models.
- 6. Discuss and assess the financial risk factors affecting organizational return and tools used for measuring risk and return effectively.
- 7. Assess the factors affecting investment decisions and opportunities presented to an organization.
- 8. Explain the process of appraising the viability of capital projects through applying investment appraisal techniques and explain the process of appraising the viability of capital projects.
- 9. Explain alternative sources of finance and investment opportunities and their suitability in particular circumstances.

## **Detailed Course Contents:**

1. Introduction: [ILO 1, ILO 2]

Goals and Functions of Business Finance; The Financial Manager; Objectives of Finance; The Financial Strategy Process for Corporation; Impact of Financial Markets and Other External Factors on a Business's Financial Strategy; Functions of Business Finance; Functions of the financial officers; Goal of Finance: Profit Maximization vs. Shareholders' Wealth maximization; Growth in Share Price; Ethics in Business Finance; The Agency Problems. Ways to minimize agency cost: Profit Percentage, Share Ownerships and Share Options.

## 2. Time Value of Money: [ILO 3]

Time Value of Money; Timelines; Future Value and Compounding; Present Value and Discounting; Opportunity Cost Rate; Fair/Equilibrium Value; Net Present Value (NPV); Future and Present Values of an Annuity; Perpetuities—Amortized Loan and Amortization Schedule; Market Value, Economic Value, Internal Rate of Return (IRR) of an Investment.

## 3. Concepts of Return and Risk: [ILO 6]

Uncertainty, Risk and Return; Risk-free and Risk-adjusted Return; Bond Returns; Return from a Stock Investment; Types of Risks: Business Risk and Financial Risk, Total Risk and Specific Risk, Diversifiable Risk and Systematic Risk, Single-Asset Risk and Portfolio Risk; Risk Measurement: Variance, Standard Deviation and Coefficient of Variation; Decision Making Methods Under Risk and Uncertainty; Sensitivity Analysis; Simulation; Expected Value and Attitude to Risk.

## 4. Introduction to Security Valuation: [ILO 5]

Valuation of Bond and Debenture; Valuation of Preferred Stock; Valuation of Common Stock: Dividend Discount Model (DDM), Capital Assets Pricing Model (CAPM), Gordon Model (GM), Free Cash Flow to Equity (FCE)

## 5. Cost of Capital: [ILO 4]

Capital Structure and its Costs; Comparison; Calculating and interpreting the Costs of Different Financing Methods; Cost of Debt; Cost of Irredeemable Debentures; Cost of Redeemable Debentures; Cost of Bank Loans and Overdrafts; Cost of Preferred Stock; Cost of Common Equity; Cost of Retained Earnings; CAPM Approach; Bond: Yield-plus-Risk Premium Approach, Dividend-Yield-plus-Growth-Rate; Discounted Cash Flow (DCF) Approach; Cost of Newly Issued Common Stock or External Equity; Weighted Average Cost of Capital (WACC); Rationale for WACC; Marginal Cost of Capital (MCC); MCC Schedule, Break Points; Factors affecting the Cost of Capital, Different Uses of Cost of Capital.

## 6. Capital Budgeting and Investment Appraisal: [ILO 7, ILO 8]

Overview of Capital Budgeting; Methods of Evaluation of Mutually Exclusive Projects and Independent Projects; Investment Appraisal Techniques: Different tools/Methods Used: Non-Discounted Approach: Payback Period (PB) and Discounted Approach: Discounted Payback Period (DPBP): Net Present Value (NPV), Internal Rate of Return (IRR), Modified Internal Rate of Return (MIRR), Profitability Index (PI); Merits and Demerits, Ranking of Different Investment Appraisal Techniques.

## 7. Sources of Financing: [ILO 9]

Financing for Small and Medium sized entities; Short-term Financing; Intermediate-term Financing; Long-term Financing; Lease Financing: Operating Lease, Capital Lease; Factors affecting a Company's Choice of Finance; Concepts of Warranties, Covenants,

Guarantees; Financing Problems of Small Firms; Notion of Venture Capital; Business Plan; the Process of Venture Capital Financing; Methods of Venture Financing; Problems and Sources of Financing Small and Medium Enterprises, and Micro Industries; Role of Banks and Non-Banking Institutions for Development of SMEs in Bangladesh.

## **Recommended Textbooks:**

- 1. Weston, J. F. and Brigham, E. F. *Essentials of Managerial Finance* (Thomson South-Western).
- 2. Brigham, E. F. and Houston, J. F. *Fundamentals of Financial Management* (Thomson South-Western).
- 3. Van Horne, J. C. and Wachowicz Jr., J. M. *Fundamentals of Financial Management* (Prentice Hall).
- 4. Van Horne, J. C. Financial Management and Policy (Prentice Hall).

## 2203: Cost Accounting

## **Course Objectives:**

The objectives of this course are to introduce cost accounting as a separate branch of accounting and to enrich students with the knowledge of measurement, analysis, accumulation and control of various elements of cost. The course is also designed to enhance students' ability to prepare cost statements and use them for preparing the financial statements of manufacturing entities.

## Intended Learning Outcomes (ILOs):

Upon successful completion of this course, students will be able to:

- 1. Understand cost accounting, its relations with other branches of accounting and its relevance for business.
- 2. Explain costing, its types, methods and techniques.
- 3. Illustrate the preparation of cost statements and its significance for financial statements.
- 4. Demonstrate various issues relating to costing and control of materials.
- 5. Learn alternative inventory valuation methods.
- 6. Understand issues of labor wages and other benefits, different wage plans and develop effective wage plan for an organization.
- 7. Identify manufacturing overhead, allocation bases and application of overhead.
- 8. Learn allocation of support department costs under different methods.
- 9. Explain the nature of job costing and batch costing.
- 10. Identify the situations in which process-costing systems are appropriate.
- 11. Understand the basic concepts of process costing and compute unit costs.
- 12. Illustrate service costing for various service-oriented organizations.
- 13. Learn the basic features of an integrated accounting system.

## **Detailed Course Contents:**

## 1. Introduction to Cost Accounting: [ILO 1]

Definition and Objectives of Cost Accounting; Importance of Cost Accounting; Cost Accounting vs. Financial Accounting; Evolution of Cost Accounting; Methods and Techniques of Cost Accounting; Characteristics of an Ideal Cost Accounting System; Installation of a Cost Accounting System; Modern Trends in Cost Accounting.

## 2. Cost Concepts, Classification and Preparation of Cost Statements: [ILO 2, ILO 3]

Costs and Cost Terminology; Concepts of Asset, Cost, Expense, and Loss; Classification of Costs; Factory Cost Flow; Statement of Cost of Goods Manufactured and Sold; Preparation of Income Statement for a Manufacturing Firm; A Framework for Cost Accounting and Cost Management.

## 3. Costing and Control of Materials: [ILO 4, ILO 5]

Nature and Types of Materials; Materials Control; Materials Procurement and Related Issues; Economic Order Quantity (EOQ) (Reorder Quantity), Reorder Level, Safety or Minimum Stock Level, Maximum Stock Level; Issue of Materials to Production Process, Materials Returned to the Storeroom, Materials Returned to Supplier; Materials Costing; Costing Materials Issued: First-in-First-out (FIFO), Last-in-First-out (LIFO), Simple Average, Weighted Average, Periodic Simple Average, Periodic Weighted Average, Moving Simple Average, Moving Weighted Average, Standard Price, Inflated Price, Replacement Price or Market Price; Lower of Cost or Net Realizable Value (NRV); Inventory Control Techniques: Pareto or ABC Analysis, Just-In-Time (JIT) Method; Accounting for Material Losses – Scrap, Spoilage, Defectives, Waste (or Wastage).

## 4. Costing and Control of Labor: [ILO 6]

Direct Labor and Indirect Labor; Organization for Labor Control; Wage Systems; Incentive Wage Plans: Time rate, piece rate; Job Evaluation and Merit Rating; Time and Motion study; Labor turnover; Treatment of Labor Cost-Related Items: Overtime, Overtime Premium, Idle Time, Fringe Benefits, Shift Premium, Holiday and Vacation Pay, Learner's or Apprentices' Wages, Attendance Bonuses, Leave with Pay, Employer's Contribution to Insurance; Casual Workers, Out-Workers, Outside Workers.

## 5. Costing and Control of Manufacturing Overhead: [ILO 7]

Factory Overhead – Fixed and Variable; Accounting for Factory; Collection and Codification of Factory Overheads; Allocation and Apportionment of Factory Overheads; Absorption of Factory Overheads; Overhead Rates: Actual vs Predetermined (Standard); Under or Overabsorption of Overhead.

## 6. Cost Allocation: Departments: [ILO 8]

Production Departments and Departments; Allocating Costs of a Support Department; Allocating Costs of Multiple Support Departments Support; Allocating Common Costs; Methods of Allocation: Direct Method, Step or Sequential Method, Reciprocal Method; Departmental Overhead Rates.

## 7. Job-order Costing and Batch Costing: [ILO 9]

Nature of Job Costing; Job Cost Sheet and Job Ledger; Recording Costs on Jobs: Materials Costs, Labor Costs, Direct Expenses, Overhead; Recording Completed Jobs; Batch Costing; Economic Batch Quantity.

## 8. Process Costing: [ILO 10, ILO 11]

Nature of Process Costing; Job Order Costing vs Process Costing; Physical Flow; Flow of Costs; Elements of Process Costs (Material, Labor, Factory Overhead, and Transferred-in

Costs); Methods of Determining and Accounting for Cost Flows (Weighted Average vs. FIFO); Equivalent Units of Production; Cost of Production Report; Journal Entries Using Process Costing; Hybrid Costing System.

## 9. Service Costing: [ILO 12]

Nature of Service Costing; Basic Principles; Accounting Records; Costing of Service Concerns: Transport, Canteen, Hotel, Powerhouse, Hospital or Clinic, Educational Institutes.

## 10. Integrated Accounting System: [ILO 13]

Definition; Features; Advantages of Integration; Journal Entries; WIP Account; Finished Goods Account; Cost of Goods Sold Account; Cost of Sales Account; Preparation of Financial Statements; Reconciliation of Cost Accounting and Financial Accounting Records.

## **Recommended Textbooks:**

- 1. Datar, S. M. and Rajan, M. V. Horngren's Cost Accounting: A Managerial Emphasis, (Pearson).
- 2. Jawahar Lal, Srivastava, S. and Singh, S. Cost Accounting, (McGraw Hill) India.
- 3. Khan, M. Y. and Jain, P. K. Management Accounting, (McGraw Hill) India.

## **Reference Materials:**

- 1. Lanen, W., Anderson, S. and Maher, M. Fundamentals of Cost Accounting, (McGraw Hill).
- 2. Hilton, R. W. and Platt, D. *Managerial Accounting*, (McGraw Hill India).

## 2204: Marketing

## **Course Objectives:**

This course introduces students to the fundamental building blocks of marketing, stressing on the underlying principles of the "marketing concept" and integrating concepts in relation to consumer needs, market information, product development, pricing, distribution, selling, advertising, and promotions.

## Intended Learning Outcomes (ILOs):

Upon completion of this course, students will be able to:

- **1.** Understand the core concepts of marketing, marketing process, and marketing management.
- 2. Develop strategic marketing and business planning.
- **3.** Analyze market opportunities by scanning the marketing environment and consumer buying behavior.
- 4. Develop and apply marketing strategies.
- **5.** Plan and design marketing mix and programs including product, price, and promotions.

- 6. Create a competitive advantage and understand the global marketplace.
- 7. Learn sustainable and social marketing and ethics.

## **Detailed Course Contents:**

## 1. Understanding Marketing: [ILO 1, ILO 2]

- **1.1. Assessing Marketing's Critical Role in Organizational Performance:** What is marketing; core concepts; the marketing process, marketing management; marketing orientations; and demarketing.
- **1.2. Building Customer Satisfaction through Quality, Service & Value:** define customer value & satisfaction; customer relationship management (CRM); delivering customer value & satisfaction; attracting & retaining customers.
- **1.3. Winning Markets through Market-oriented Strategic Planning:** Corporate and division planning; business strategic planning.
- 2. Analyzing Marketing Opportunities: [ILO 1, ILO 3]
  - **2.1 Scanning the Marketing Environment:** Analyzing needs & trends in the microenvironment; identifying & responding to the major macro-environmental forces.
  - **2.2 Analyzing Consumer Markets and Buying Behavior:** A model of consumer behavior; major factors influencing buying behavior; the buying process; identifying market segments and selecting market targets; market targeting.

## 3. Developing Marketing Strategies: [ILO 1, ILO 2, ILO 4]

- **3.1 Differentiating and Positioning the Market Offering:** Tools for competitive differentiation; developing a positioning strategy; communicating the company's position.
- **3.2 Developing New Products:** Process the of new product development, challenges, and way forwards.
- **3.3 Managing Life Cycle Strategies:** the product life cycle; marketing strategies throughout the PLC.

## 4. Planning Marketing Programs: [ILO 1, ILO 2, ILO 5]

- **4.1 Managing Product Lines, Brands & Packaging:** What is a product; levels of a product; product classifications; product line decisions; product mix decisions; brand decisions; packaging & labelling decisions.
- **4.2 Managing Service Business and Product Support Services:** Nature of and classification of services; characteristics of services and their marketing implications; marketing strategies for service firms; managing product support services.
- **4.3 Designing Pricing Strategies and Programs:** Selecting the pricing objective; determining demand; estimating costs; analyzing company competitors', prices, and offers; selecting a pricing method; selecting the final price; price discounts and allowances; promotional pricing; product mix pricing; initiating & responding to price changes.
- **4.4 Selecting & Managing Marketing Channels:** What are marketing channels; channel functions; channel levels; channel design decisions; channel management decisions.

- **4.5 Managing Retailing, Wholesaling, and Market Logistics**: Retailing; wholesaling; marketing logistics.
- **4.6 Designing and Managing Integrated Marketing Communications**: Identify the target audience; determine the communication objective; design the message; select the communication channel; establish the total promotional budget; decide on the promotion mix.
- **4.7 Managing Advertising, Sales Promotion, and Public Relations:** Developing and managing an advertising program; the purpose of sales promotion; major decisions in sales promotion; major decisions in marketing PR.
- **4.8 Managing the Sales Force:** Designing the sales force; managing the sales force; principles of personal selling
- **4.9 Managing Direct & Online Marketing:** Growth and benefits of direct marketing; major channels for direct marketing; marketing in the 21<sup>st</sup> century.
- 5. Extending Marketing [ILO 1, ILO 6, ILO 7]
  - **5.1 Creating Competitive Advantage:** Competitor analysis, competitive strategies, and balancing customer and competitor orientations.
  - **5.2 The Global Marketplace:** Global marketing today, global marketing environment, going global, global marketing program, global marketing organization.
  - **5.3 Sustainable and Social Marketing and Ethics:** Sustainable marketing, social marketing, social criticism of marketing, ethical issues in marketing.

## **Recommended Textbooks:**

- 1. Kotler, P. and Armstrong, G. Principles of Marketing. (Pearson Education Ltd.)
- 2. Kotler, P. and Keller, K. L. *Marketing Management: Analysis, Planning, Implementation and Control.* (Pearson Education Ltd.)
- 3. ICAB Study Manual: Business Strategy. Professional Stage Application Level, ICAB

#### 2205: Business Statistics-II

#### **Course Objectives:**

The objective of this course is to develop the understanding of different statistical methods which are widely used for drawing inferences, or making broad generalizations, about a totality of observations on the basis of knowledge about a part of that totality. Beginning from an elementary level, this course introduces the idea of random variables, some probability distributions, estimations of parameter, confidence intervals and hypothesis testing. With these foundations students will also be introduced to the concepts of analysis of variance, index numbers and time series analysis to improve the level of forecasting future. At the completion of this course, the students should be able to develop a general understanding of probability and hypothesis testing approaches that will sharpen the skills of taking business and managerial decisions.

#### **Intended Learning Outcomes (ILOs):**

At the completion of this course, the students should be able to:

- 1. Understand the basic ideas of random variables and also different Probability Distributions which are widely used in taking various business decisions.
- 2. Know the importance of central limit theorem to the study of Sampling distributions.
- 3. Get into the idea of Estimation and Confidence intervals to represent the data set.
- 4. Develop an understanding of the formulation of Testing Hypothesis in the area of business and will be able to find the answer to a question by hypothesis testing for large and small samples.
- 5. Learn Analysis of Variance to find out the differences between more than two groups of data and test their statistical significance.
- 6. Comprehend the concepts of time series analysis that will develop the understanding of underlying causes of trends or systemic patterns over time.
- 7. Apply the knowledge of how Index Number measures the changes in a variable or group of related variables with reference to time, geographical location, and other characteristics.
- 8. Acquire ideas of different process control.
- 9. Obtain information on how nonparametric tests can be used without considering the underlying assumptions on the shape of the probability distribution of the population.

## **Detailed Course Contents:**

## 1. Random Variables and Probability Distribution: [ILO 1]

Definition of Random Variable and its Types; Probability Distributions of a Random Variable; Discrete and Continuous Probability Distribution; Binomial Distribution; Poisson Distribution; Normal distribution; Standard Normal Distribution; Standard Normal Variate; Important Properties of these Distributions; Fittings of Binomial and Poisson Distribution, and Application of Numerical Problems.

## 2. Sampling Distribution: [ILO 2]

Concept of Sampling Distribution ; Central Limit Theorem and its Application in Business; Sampling Distribution of Samples are Drawn with and without Replacement; Sampling Distribution of Difference between Two Sample Means (Samples are drawn with and without Replacement); Sampling Distribution of Sample Proportion (Samples are drawn with and without Replacement); Sampling Distribution of difference between Two Sample Proportions (Samples are drawn with and without Replacement); Application of Numerical Problems.

## 3. Estimation and Confidence Intervals: [ILO 3]

Estimation and its Types; Meaning of Point and Interval Estimation; Confidence Interval; Properties of a Good Estimator; Estimation Methods; Confidence Interval Estimation for the Mean ( for Known, Unknown , Large, and small value of n ); Confidence Interval Estimation for the Difference between Two Population Means ( for Known, Unknown , Large, and small value of n ); Confidence Interval Estimation for Population Proportion P; Confidence Interval Estimation of the Difference between Two Population Proportions ; Sample Size Determination for Mean and Proportion, Application of Numerical Problems.

## 4. Large-Sample Inferences about Population Parameters: [ILO 4]

Hypothesis Testing and its Types; Null Hypothesis; Alternative Hypothesis; Different Steps involved in Hypothesis Testing; One-Tailed Test; Two Two-TailedTailed Test; Type I Error; Type II Error; Level of Significance; Power of a Test; Meaning of P-value;

Different Steps for Calculating the p-value of a Test Statistic for Testing a Null Hypothesis; Decision to Reject Using P-Value; Standard Normal Test; Tests for Population Mean and Proportion; Tests of Equality of Two Population Means and Two Populations Proportions in Case of Large Samples (Z-test); Application of Numerical Problems.

## 5. Small-Sample Inferences about Population Parameters: [ILO 4]

Comparison Between z and t distribution; Student t-Test; Tests of Hypothesis of Population Mean in Case of Small Samples (t-Test); Test of Equality of Two Means in Case of Independent and Dependent Samples; Test of Zero Correlation Coefficient; and; Application of Numerical Problems.

## 6. Analysis of Variance: [ILO 5]

Meaning of Analysis of Variances; Precision of a Design; Efficiency of a Design; Completely Randomized Design (CRD); One-Way Classification; Test of Significance of Two Treatment Means in a CRD; Advantages and Disadvantages of Completely Randomized Design (CRD); Randomized Block Design (RBD): Two-Way Classification; Test of Significance of Two Treatment Means in RBD; Relative Efficiency of RBD to CRD; Analysis of LSD; Test of Significance of Two Treatment Means in LSD; Relative Efficiency of LSD to RBD, Application of Numerical Problems.

## 7. Index Number: [ILO 7]

Definition and Importance of Index Number; Price, Quantity and Value index; Factors affecting Index Number, Problems Involved in the Construction of an Index Number; Uses of Index Numbers; Methods for Constructing Unweighted Index Numbers; Methods for Constructing Weighted Index Numbers; Tests for Consistency of Index Numbers; Cost of Living Index Numbers; Different Steps Involved in the Construction of Cost of Living Index Numbers; Methods of Constructing Cost of Living Index Numbers; Uses of Cost of Living Index Numbers; Chain Base Index Numbers: Link Relatives, Important Properties of Index Numbers; Application of Numerical Problems.

## 8. Business Forecasting and Time Series Analysis: [ILO 6]

Concepts and significance of Time Series Analysis; Uses of Time Series Analysis; Components of Time Series: Secular trend (Long-term Movement), Seasonal Variation, Cyclical Variation, Irregular Variation; Mathematical Models of Time Series Analysis; Different Methods for Measuring Trend: Graphical Method, The Least Square Method, Methods for Measuring Seasonal Variations: Method of Simple Averages, Ratio to Trend Method, Ratio to Moving Average Method, Application of Numerical Problems.

## 9. Nonparametric Tests: [ILO 9]

Meaning of Nonparametric Test; Advantages of Nonparametric Test; Chi- Square Test, Applications and Condition of applying Chi- Square Test; Tests of Goodness of Fit; Contingency Table; Determination of Expected Cell Frequencies of a Contingency Table; Test of Independence; One Sample Sign Test; The Mann-Whitney U Test for Independent Samples; Test of Randomness; Application of Numerical Problems.

## 10. Statistical Quality Control: [ILO 8]

Concept and Characteristics of Quality control; Causes of Variation; Process Control; Control Charts: x chart, R-chart, Pie-chart, C-chart.

## **Recommended Textbooks:**

- 1. Levin, R. I. and Rubin, D. S. Statistics for Management (Prentice Hall).
- 2. Gupta, M. P. and Gupta, S. P. Business Statistics (Sultan Chand & Sons).

## **References Materials:**

- 1. McClave, J. T., P. G. Benson and T. Sincich. *Statistics for Business and Economics* (Prentice Hall).
- 2. D. A. Lind, W. G. Marchar and S.A. Wathen. *Basic Statistics for Business and Economics* (McGraw-Hill).
- 3. S. P. Gupta. *Statistical Methods* (Sultan Chand & Sons).

## THIRD YEAR FIRST SEMESTER

## **3101: Management Accounting**

## **Course Objectives:**

Management Accounting is concerned with providing necessary information to internal users i.e., managers for making effective organizational decisions. This course describes both theory and practice so that students understand how managers produce and use information in operational and strategic decision making. This course will further provide students with the elementary idea about management accounting tools and techniques.

## **Intended Learning Outcomes (ILO):**

Upon successful completion of this course, students will be able to:

- 1. Describe what managers do and why they need accounting information.
- 2. Explain the importance of cost behavior and their relationship with managerial decision making.
- 3. Explain the relationship among cost, volume and profit in a single product and multiproduct cases.
- 4. Understand the sensitivity of profit in changing circumstances and in a taxed business environment.
- 5. Explain how some costs transfer from one period to another with costing systems.
- 6. Describe ABC as a better cost management approach and understand how the limitations of conventional cost allocation can be eliminated through proper resource allocation.
- 7. Give elementary idea about budgets and budgetary control.
- 8. Explain the need for flexible budgeting technique for performance analysis.
- 9. Develop an understanding of standard cost and its application in business.
- 10. Give ideas about price, quantity and efficiency variances and their interpretations for managerial performance.
- 11. Understand the difference between joint products and by-products and their cost allocation methods.
- 12. Explain the concept of decentralization and responsibility centers.

## **Detailed Course Contents:**

# 1. Management Accounting, Business Organizations and Professional Ethics: [ILO 1]

Definition of Management Accounting; Scope and Functions of Management Accounting; Evolution of Management Accounting; Financial Accounting vs. Management Accounting; Cost Accounting vs. Management Accounting; Expanding Role of Management Accountants; the Management Accounting Profession; Code of Ethics for Management Accountants.

## 2. Cost Behavior: [ILO 2]

Cost Behavior; Analysis and Measurement of Cost Behavior: Variable, Fixed, Mixed; Methods of Segregating Mixed Costs into Fixed and Variable Costs (High-Low Method; Inspection of Accounts/Accounts Classification Method; Engineering Method; Scatter graph Method, Ordinary Least Squares or Regression Method); Contribution Format of Income Statement.

## 3. Cost-Volume-Profit Analysis: [ILO 2, ILO 3, ILO 4]

Assumption and Uses of Cost-Volume-Profit (CVP) Analysis; Graphical Approach to CVP Analysis; Breakeven Analysis; Computations of Breakeven Point: Equation Method, Formula Method and Graphical Method; Target Net Operating Income with and without taxes; Sensitivity Analysis; Margin of Safety; Degree of Operating Leverage (DOL); CVP Analysis Under Multi-Product Situations; Limitations of CVP Analysis.

## 4. Variable Costing and Absorption Costing: [ILO 2, ILO 5]

Variable Costing and Absorption Costing: Nature and Comparison; Product Cost and Income Statement Under Different Costing System; Reconciliation of Absorption Costing Income with Variable Costing Income; Transfer of Fixed Manufacturing Overhead from one Period to Another; Over/Under-Production Compared to Standard; Uses and Limitations of Absorption Costing and Variable Costing.

## 5. Activity-Based Costing and Activity-Based Management: [ILO 6]

Traditional Costing System and its Application and Limitation; Definition of Activity-Based Costing (ABC); Steps of ABC; Treatment of Cost under Traditional and ABC System; Comparison of Traditional and ABC Product Costs; Designing an ABC System; Benefits and Criticisms of ABC; Meaning of Activity-Based Management (ABM.

## 6. Introduction to Budgets and Preparation of the Master Budget: [ILO 2, ILO 7] Budget and Budgeting; Purpose of Budgeting; Types of Budgets and their Relations; Budget as a Planning and Control Tool; Budgeting Process; Preparation of Functional Budgets; Cash Budget; Master Budget; Budgeted Income Statement; Budgeted Balance Sheet; Behavioral Aspects of Budgeting.

## 7. Flexible Budgets and Performance Analysis: [ILO 2, ILO 8]

Limitations of a Static Budget and the Need for a Flexible Budget; The Preparation of Flexible Budget; Flexible Budget and Performance Report.

## 8. Standard Costing and Variance Analysis: [ILO 9, ILO 10]:

Meaning and Purposes of Standard Cost; Need for the Setting up of Standard; Consideration in Establishing Standard; Types of Standards; Calculation of Variances: Material Price and Usage Variances, Labor Rate and Efficiency Variances, Overhead

Volume and Spending Variances; Interpretations of Different Variances; Recording Journal Entries Under the Standard Costing System; Performance Report.

9. Cost Allocation: Joint Products and By-Products: [ILO 11]

Basic Concepts: Joint Products and By-Products, Common Costs and Joint Costs, Split Off Point and Separable Costs; Allocation of Joint Costs; Assignment of Costs to Joint Products: Market or Sales Value Method, Quantitative or Physical Unit Method, Average Unit Cost Method, Weighted Average Cost Method; Irrelevance of Joint Costs for Decision Making; Accounting for By-Products: Products: Production Method and Sales Method; Journal Entries for By-Products.

## 10. An Introduction to Responsibility Accounting: [ILO 12]

Meaning and Objectives of Responsibility Accounting; Financial Control and its Relationship with Operations Control; Centralization vs. Decentralization; Advantages and Disadvantages of Decentralization; Decentralization and Responsibility Centers: Cost Center, Profit Center and Investment Center.

## **Recommended Textbooks:**

- 1. Datar, S. M. and Rajan, M. V. Horngren's Cost Accounting: A Managerial Emphasis, (Pearson).
- 2. Horngren, C. T., Sundem, G. L., Burgstahler, D. and Schatzberg, J. O. *Introduction to Management Accounting*, (Pearson).
- 3. Garrison, R. H., Noreen, E. and Brewer, P. C. *Managerial Accounting*, (McGraw Hill India).

## **Reference Materials:**

- 1. Lanen, W., Anderson, S. and Maher, M. *Fundamentals of Cost Accounting*, (McGraw Hill).
- 2. Bhimani, A., Horngren, C. T., Datar, S. M. and Rajan, M. V. *Management & Cost Accounting*, (Pearson).
- 3. Khan, M. Y. and Jain, P. K. Management Accounting, (McGraw Hill) India.

## **3102: Banking and Insurance**

## **Course Objectives:**

The objectives of this course are to give an overview about the business environment of banking financial institutions and insurance companies in Bangladesh. This will provide students with an overview about the financial reporting environment of Banking and Insurance Companies in Bangladesh. It will make the students familiar with the compliance requirements and reporting framework to prepare the financial statements of Banking financial institutions and Insurance Companies.

## Intended Learning Outcomes (ILOs):

Upon completion of the course, students should be able to:

- 1. Understand the history, nature and classification of banking financial institutions.
- 2. Describe the theories and functions of central bank and commercial banks in Bangladesh.

- 3. Prepare and present the financial statements of banking financial institutions.
- 4. Explain the general concepts of insurance and the development of insurance business in Bangladesh.
- 5. Understand the various principles and provisions that govern the life insurance.
- 6. Identify and familiar with the nature and policies of fire/ marine and others insurance.
- 7. Know how to compute insurance claims and prepare financial statements of insurance companies.

## **Detailed Course Contents:**

## PART A: Banking Financial Institution

## 1. Evolution of Banking Financial Institutions: [ILO 1]

Introduction to Banking- Origin, Growth and Development of Banking, Historical Development of Banking Systems, Banking History of Bangladesh and its Present Status.

## 2. Classification of Banks: [ILO 1]

Central Bank-Commercial Banks-Investment or Industrial Banks-Exchange Banks-Co-operative Banks-Land Mortgage Banks-Savings Banks- Merchant Banks-Specialized Banks-Mixed banking-Group banking-Chain banking-Unit banking-Branch banking-Off shore and onshore banking.

## 3. Central Bank: [ILO 2]

Characteristics of a Central Bank; Nature and Functions of Central Bank; Necessity of Central Bank; Central Banking Theory, Comparison between Central Bank and Commercial Bank, the Clearing House System.

## 4. Commercial Bank: [ILO 2]

Theories of Commercial Banking; Functions of Commercial Banks and the Services Rendered by Commercial Banks; Certain Sound Commercial Banking Principles; Employment of Fund by Commercial Banks; the Process of Multiple Credit Expansion; Risks and Objectives of Risk Management; Elements of Sound Risk Management Systems; Risk Management Guidelines for Banks; Regulations of Banks By Bangladesh Bank (BB) and the Bangladesh Securities and Exchange Commission (BSEC); Classified Loans and Loan Loss Provisions; Operation and Management; Inspection and Investigation; Accounts and Audit; Submission of Return and Reports; Corporate Governance Guidelines and Practices in Banks; Green Banking; SME Banking; Corporate Social Responsibility; Enterprise Risk Management; BASEL III; Risk-Based Capital Adequacy; Stress Testing.

## 5. Preparation and Presentation of Bank's Financial Statements: [ILO 3]

Reporting framework of bank-Regulations of voluntary reporting and mandatory reporting-Various provisions of Bank Companies Act 1991, Preparation of Financial Statements of Banking Companies as per BB's Guidelines; Presentation and Disclosure in the Financial Statements of Islamic Banks; Ideas on IAS 39/IFRS 9 in preparation of Bank's Financial Statements.

## 6. Insurance Company in Bangladesh: [ILO 4]

Concept of Insurance; Development of Insurance Company in Bangladesh and present status; Role and Functions of Insurance; Principles of Insurance; Classification of Insurance Business and Policies; Insurance Development and Regulatory Authority (IDRA); Accounts, Audit, Actuary Report and Statements (IFRS 4, IAS 19 and IAS 26); Actuary and Actuary Valuation; Commissions, Rebates and Management Expenses; Distribution of Dividend; Bonus and Profit; Registers; Submission of Returns; Re-Insurance Business in Bangladesh; Role of Insurance Academy.

## 7. Life Insurance: [ILO 5]

Life Assurance Contract; Types of Policies; Certain Aspects of Life Assurance; Actuary Valuation; Premium, Valuation and Surplus Calculation; Surrender Value; Settlement of Claims; Life fund; Present Status of Life Insurance Business in Bangladesh; Methods of Spreading Insurance in Rural Areas; Loan Against Life Policy, Policy Lapsation, Policy Renewal.

## 8. Fire Insurance: [ILO 6]

Material Loss Insurance; Consequential Loss Insurance; Settlement of Claims; Extent of Loss by Fire in Bangladesh, Moral Hazard, Management Problems of Fire Insurance.

## 9. Marine Insurance: [ILO 6]

Marine Insurance Contract; Types of Policies; Maritime Perils; Marine Losses, Settlement of Claims; Act of God.

## 10. Other Insurance: [ILO 6]

Health Insurance; Postal Life Insurance; Crop Insurance; Cattle Insurance; Civil Aviation Insurance; Export Credit Guarantee Insurance; Group Insurance; Bank Deposit Insurance; Fidelity Insurance etc.

## **11. Financial Statements of Insurance Companies: [ILO 7]** Computation of Insurance Claims; Preparation of Financial Statement of Insurance Companies as Per Guidelines of the IDRA.

## **Recommended Textbooks:**

- 1. Chowdhury, A.H. Elements of Insurance
- 2. Mishra, M. N. Insurance: Principles & Practices, (S. Chand Ltd.)
- 3. Sethi, T. T. Money, Banking and International Trade, (S. Chand Ltd.)
- 4. Shekhar, K. C. Banking Theory and Practice, (VIKAS)
- 5. Crosse, H. D. and Hempt, G. H. Management Policies for Commercial Banks

#### **3103: Audit and Assurance**

## **Course Objectives:**

The objective of this course is to introduce the concept of auditing and assurance as a demand driven discipline necessitated by the economic imperative and guided by social justification. The course focuses on the regulatory and professional framework of audit engagement, including ethical consideration and the professional liabilities. Besides, an attempt has been made to establish the logical order for audit of historical financial information as a whole and issuance of the audit report.

## Intended Learning Outcomes (ILOs):

Upon completion of the course, the students will be able to:

- 1. Comprehend the nature of auditing and assurance services, their types, importance and distinguish audit services from other assurance and non-assurance services.
- 2. Understand the regulatory framework of statutory audit in Bangladesh.
- 3. Know the standard setting bodies and the professional standards for auditing engagement.
- 4. Get an overview of the audit of historical financial information, including the audit expectation gap.
- 5. Understand the basic process for audit of historical financial information.
- 6. Understand the processes involved in accepting and managing audit engagement.
- 7. Understand the audit planning in detail through understanding the entity's environment and its internal control system, determining materiality and assessing the risk.
- 8. Know various types of audit tests and perform audit tests and evaluate audit evidence.
- 9. Understand audit report and various situations for appropriate audit report.
- 10. Understand the importance of ethical behavior to a profession and identify issues relating to professional ethics and safeguard thereon; and
- 11. Know about the professional liabilities as an auditor.

## **Detailed Course Contents:**

## 1. Audit and Assurance Engagement: [ILO 1]

Concept of Audit and Assurance Engagements; Assurance Process; Levels of Assurance; Importance of Assurance Services; Limitations of Assurance; Framework for Assurance Engagement; Purposes and Characteristics of Different Assurance Engagements; Auditing and Its Characteristics; Concept of Reasonable Assurance; Scope of Auditing; Objectives of Audit; Economic Demand for Auditing; Reduction of Information Risk; Historical Background of Audit; Types of Audit - Operational Audit, Financial Statements Audit, Compliance Audit, Interim and Final Audit, Cost Audit, Management Audit, Social Audit, Performance Audit, Value-for-Money Audit, 3E Audit, Due Diligence Audit, Forensic Audit, System Audit, Continuous Audit, Internal Audit, External Audit, Government Audit, Tax Audit.

## 2. Regulatory Framework of Statutory Audit in Bangladesh: [ILO 2]

Legal Provisions of Audit as per the Companies Act 1994 (Section 210 to Section 220); Legal Provisions for Keeping Books of Records as per the Companies Act 1994 (Section 181, 183-187, 189); Securities and Exchange Rules, 1987, Bank Companies Act, 1991; Insurance Act, 2010; Income Tax Ordinance, 1984.

## 3. Professional Bodies and Professional Standards: [ILO 3]

Regulatory Body vs Standard Setting Body; Regulatory Body - Financial Reporting Council (FRC), Bangladesh Securities and Exchange Commission (BSEC), Bangladesh Bank (BB), Insurance Development and Regulatory Authority (IDRA); Standard Setting Body - International Federation of Accountants (IFAC), International Accounting Standard Board (IASB), Financial Accounting Standard Board (FASB); Professional Body – the Institute of Chartered Accountants of Bangladesh (ICAB), the Institute of Cost and Management Accountants of Bangladesh (ICMAB), the Institute of Chartered Secretariat of Bangladesh (ICSB); Auditing Profession in Bangladesh; Need for Professional Standards; International Auditing and Assurance Standards Board (IAASB) - International Standards on Auditing (ISA), International Standards on Assurance Engagements (ISAE), International Standards on Review Engagements (ISRE), International Standards on Related Services (ISRS), International Standards on Quality Control (ISQC), International Auditing Practice Notes (IAPN); Adoption of Auditing Standards in Bangladesh.

## 4. Overview of Audit of Historical Financial Information: [ILO 4]

Objective of Financial Statements Audit (ISA 200); Management's Responsibilities; Auditor's Responsibilities; Professional Skepticism; Professional Judgement; Management Assertions; Setting Audit Objectives – Transaction and Balance Related Audit Objectives; Expectation Gap in Audit Service; Audit Limitations.

# 5. Process for Audit of Historical Financial Information: [ILO 5, ILO 6, ILO 7, ILO 8, ILO 9]

## a. Accepting the Audit Engagement/Pre-engagement Procedures [ILO 6]

Client Intimation; Evaluation of Management's Integrity; Identification of Unusual Issues; Professional Clearance; Form 23B; Evaluation of Independence; Due Care; Agreeing the Terms of Engagement Letter (ISA 210); Ensure Quality Control for an Audit (ISA 220).

## b. Audit Planning [ILO 7]

Planning an Audit of Financial Statements (ISA 300) – Set Overall Audit Strategy, Benefits of Audit Plan, Develop an Audit Plan, Audit Planning Checklist; Identifying and Assessing the Risk of Material Misstatements through Understanding the Entity and Its Environment (ISA 315); Understanding Client's Internal Control Systems, COSO Components of Internal Control; Impact of IT Infrastructure on Internal Control; Walkthrough Test and Assessing the Control Risk; Preliminary Analytical Procedure; Materiality – Materiality for Financial Statements as a Whole, Performance Materiality (ISA 320); Risk-based Audit Approach; Audit Risk – Audit Risk Model, Assessing Acceptable Audit Risk; Considering Fraud Risk (ISA 240); Audit Planning Memorandum and Audit Program.

## c. Perform Audit Test [ILO 8]

Control Test; Substantive Test – Substantive Test of Transactions, Substantive Analytical Procedures, Tests of Details of Balances; Evidence (ISA 500); Persuasiveness of Audit Evidence - Sufficiency and Appropriateness of Audit Evidence; Evidence Mix; Analytical Procedures (ISA 520); Audit Sampling (ISA 530); Written Representations (ISA 580); Documentation and Working Papers (ISA 230).

## d. Competing the Audit and Issue an Audit Report [ILO 9]

Complete the Field Work; Evaluate the Findings; Consider Subsequent Events (ISA 560); Communicating with those Charged with Governance and Management (ISA 265); Form the Final Audit Opinion and Issue the Audit Report (ISA 700, ISA 701) – Components of an Audit Report, Key Audit Matters; Auditor's Decision Process for Audit Reports – Materiality; True and Fair View/Fairly Presented; Audit Opinion -

Clean Opinion/Unqualified Opinion; Modifications to the Opinion - Qualified Opinion, Adverse Opinion, Disclaimer of Opinion (ISA 705); Emphasis of Matter Paragraph and Other Matter Paragraphs in the Audit Report (ISA 706); Going Concern Issue (ISA 570).

## 6. Professional Ethics: [ILO 10]

Definition of ethics; Role of ethical codes and its importance for profession; Difference between rule-based and principle-based ethical code; IFAC Code of Ethics; Fundamental principles of Ethics - Integrity, Objectivity, Professional Competence and Due Care, Confidentiality and Independence; Resolving Ethical Conflicts; Conflict of Interest; Confidentiality and Its Importance; Safeguards to Confidentiality; Disclosure of Confidential Information; Independence and Its Requirements in an Assurance Engagement; Threats to the Fundamental Ethical Principles and the Independence of Assurance Providers: Self-Interest threat, Self-Review Threat, Management Threat, Advocacy Threat, Familiarity Threat, Intimidation Threat; Safeguards to Eliminate or Reduce Threats.

## 7. Liabilities of Auditors: [ILO 11]

Nature of Liabilities of Professional Accountants; Business Failure; Audit Failure; Audit Risk; Liability of an Auditor under the Companies Act; Liabilities under Income Tax Ordinance; Contractual Liability; Civil Liability – Liability for Negligence, Liability for Misfeasance; Criminal Liability; Liability to Clients; Liability to Third Parties; Liability of an Auditor for Libel; Professional Response to Legal Liability; Notable Legal Cases.

## **Recommended Textbooks:**

- 1. Arens, A. A., Elder, R. J., Beasley, M. and Hogan, C. E. Auditing and Assurance Services: An Integrated Approach. (Prentice-Hall).
- 2. Hayes, R., Dassen, R., Schilder, A. and Wallage, P. *Principles of Auditing*, (Prentice-Hall).
- 3. Woolf, E. Auditing Today, (Prentice-Hall).

## **Reference Materials:**

- 1. The Bangladesh Chartered Accountants Order, 1973 and Bylaws.
- 2. *Companies Act 1994,* Securities and Exchange Rules 1987, Bangladesh Banks Circulars etc.
- 3. Assurance Study Manual- CA Certificate Level: Institute of Chartered Accountants of Bangladesh.
- 4. *Audit and Assurance –Study Manual-* CA Professional Level: Institute of Chartered Accountants of Bangladesh.
- 5. Handbook of Bangladesh Standards on Auditing, Assurance, and Ethics Pronouncements (Volume-1).
- 6. Handbook of Bangladesh Standards on Auditing, Assurance, and Ethics Pronouncements (Volume-2): Bangladesh Standards on Auditing.

#### **3104: Income Tax: Laws and Practice**

## **Course Objectives:**

The objective of this course is to provide a sound understanding of principles and practices of the income tax law in Bangladesh. This course will provide students with a comprehensive knowledge of tax from a managerial perspective, with an emphasis on the identification of tax problems and potential tax opportunities. This course will also be helpful in assessing total income and tax liability of individual, corporate and other types of the assesse.

## **Intended Learning Outcomes (ILOs):**

Upon completing of the course, the students will be able to:

- 1. Understand the concepts in issues related to the tax structure in Bangladesh.
- 2. Identify the base for income tax and the income tax authority.
- 3. Compute head wise income after considering allowable deductions.
- 4. Know about set-off and carry forward of losses including exemptions, allowances and advance payment of tax.
- 5. Know about the provisions for submission of return.
- 6. Determine the assessable income and tax liability of individual assessee, partnership firm and body corporate, including tax refund and recovery.
- 7. Understand the tax appeal procedures, penalty, and prosecution.

## **Detailed Course Contents:**

## 1. Introduction to Bangladesh Income Tax: [ILO 1]

Definition of Tax; Characteristics and Purposes of Tax; Canons of Taxation; Tax Base and classification of Taxes; Tax burden and shifting of taxes; Concept of Income; Capital or Revenue; Tax and Income Tax; Different Rates of Income Tax for Different Assessees; Tax structure in Bangladesh; Role of Income tax for economic growth of Bangladesh; Scope of Bangladesh Income Tax Law; Schemes of Bangladesh Income Tax Law.

## 2. Basics of Income Tax: [ILO 2]

Definition and Characteristics of Income; Sources of Income; Determination of Assessment Year and Income Year and implications on tax liability determination; Different Classes of Assessees; Residential Status of an Assessee; Taxation Implication of Resident and Non-resident; Charge of Surcharge; Additional tax and minimum tax; Classification of Income based on Locality and Assessment; Non-assessable/Tax exempted Income; Tax Credit Income; Tax Holiday schemes; Tax rebate on CSR related expenditures.

## 3. Income Tax Authority: Administrative and Judicial [ILO 2]

Income Tax Authorities: Administrative and Judicial; Appointment; Subordination; Power and Functions; Alternative Dispute Resolution (ADR).

## 4. Computation of Income: [ILO 3]

Computation of Income under Statutory Heads: Salaries; Interest on Securities; Income from House Property; Agricultural Income; Income from Business or Profession; Capital Gains; and Income from Other Sources; Computation of Income

under Other Heads: Share of Income from Firms; Income of Spouse or Minor Children and Foreign Income.

## 5. Set-off and Carry-Forward of Losses: [ILO 4]

Provisions on Set-off of Losses in the Year of First Incurrence and its Procedure; Carry-forward and Set-off of Losses under specific Heads: Business Loss; Loss in Speculation Business; Loss under the Head Capital Gains; Loss under the Head Agricultural Income; Carry-forward of Loss of Firm and Partner; Carry-forward of Loss of Succeeded Business or Profession; Carry-forward of Loss of Unabsorbed Depreciation; Carry-forward of Loss of Tax Holiday Units.

#### 6. Payment of Tax before Assessment: [ILO 4]

Tax Deduction at Source (TDS); Advance Income Tax (AIT) and Tax Payment on the Basis of Return; TDS vs. Collection of Tax at Sources; Incomes subject to TDS and Formalities and Consequences; TDS as Final Discharge of Tax Liability u/s 82C; Requirement and Procedures of AIT and Consequence on Failure to Pay AIT.

#### 7. Return of Income and Statements: [ILO 5]

Requirement to File Return of Income; Form of Return of Income; Due Date of Submission of Return of Income; Documents to be Submitted along with the Return of Income; Return of Withholding Tax; Obligation to Furnish Annual Information Return; Certificate in Place of Return; Filling of Revised Return; Statement of Assets and Liabilities and Lifestyle; Production of Accounts and other Documents.

#### 8. Assessments: [ILO 6]

Definition of Assessment; Provisional Assessment; Assessment on Correct Return; Universal Self; Assessment & Audit thereafter; Spot Assessment; Assessment after Hearing; Assessment on the Basis of Report of a Chartered Accountant; Best Judgment Assessment; Presumptive Tax Assessment on Owners of Road and Water Transports; Various Specialized Assessments; Income Escaping Assessment; Limitation for Assessment.

## 9. Assessment of Individuals: [ILO 6]

Definition of Individual; Computation of Total Income of an Individual Assessee; Procedure of Assessment; Assessment Order and Tax Clearance Certificate.

#### 10. Assessment of Companies: [ILO 6]

Definition of Company and Types of Companies; Computation of Total Income and Tax Payable; Tax Rebate on Higher Productivity; Higher Dividend; CSR (Corporate Social Responsibility) and others; Procedure of Assessment; Assessment of Banks and other Financial Institutions; Liability of Directors for Unrecoverable Tax of Private Companies; Liability of Liquidators for Tax of Private Companies under Liquidation; Liability to Tax in case of Shipping and Air Transport Business of Non-residents.

#### 11. Default and Imposition of Penalty, Offences and Prosecution: [ILO 7]

Penalty for various Defaults; Punishment for various Offences; Trial by Special Judge.

#### **Recommended Textbooks:**

- 1. Chowdhury, D. Advanced Issues in Taxation: Theory & Practices, (Grantha Kutir), Dhaka.
- 2. The Income Tax Ordinance 1984 and the Income Tax Rules 1984 (updated).

## **Reference Materials:**

- 1. Finance Act (Latest)
- 2. ICAB Manual

#### 3105: Business Law

## **Course Objectives:**

The objective of this course is that students become familiar with the different aspects and provisions of business and commercial laws of Bangladesh and can apply these in different real business situations.

## Intended Learning Outcomes (ILOs):

Upon completing of the course, the students will be able to:

- 1. Understand Contract Law and its application in real business situations.
- 2. Understand the different provisions of Sale of Goods Act 1930 and its application in real business situations.
- 3. Understand the different provisions of Negotiable Instrument Act and its application in real business situations
- 4. Understand the Arbitration Provisions as per the law.
- 5. Understand the different provisions of Trademark and completion Acts and their application in real business situations.
- 6. Understand the different provisions of Partnership Act 1932 and Labour Act 2006 their application in real business situations.
- 7. Understand the different provisions of Bank Company Act 1991, Insurance Act 2010 and Financial Institutions Act 1993 and their application in real business situations.
- 8. Understand the different provisions of The Securities and Exchange Commission Ordinance, 1969, The Securities and Exchange Rules, 1987 The Exchanges Demutualisation Act, 2013 and their application in real business situations.

## **Detailed Course Contents:**

1. The Contract Act, 1872: [ILO 1]

Definition of Contract; Essentials of Contract; Communication, Acceptance and Revocation of Proposals and Contracts; Voidable Contracts and Void Agreements; Consignment Contracts; Contracts which must be performed; Time and Place of Performance; Contracts which need not be performed; Breach of Contract; Indemnity and Guarantee; Bailment; Bailment of Pledges; Agency: Appointment and Authority of Agents, Sub-Agents, Revocation of Authority, Agent's Duty to Principal, Principal's Duty to Agent.

## 2. The Sale of Goods Act, 1930: [ILO 2]

Formation of the Contract; Effects of the Contract; Performance of the Contract; Rights of Unpaid Seller against the Goods; Suits for Breach of the Contract.

3. The Negotiable Instruments Act, 1881: [ILO 3]

Promissory Notes, Bills of Exchange and Cheques; Negotiations; Payment and Interest; Discharge from Liability on Notes, Bills and Cheques; Notice of Dishonour; Special Provisions Relating to Cheques; Special Provisions Relating to Bills of Exchange; Penalties in Case of Dishonour of Certain Cheques for Insufficiency of Funds in the Accounts.

#### 4. The Arbitration Act, 2001: [ILO 4]

Arbitration Agreement; Subject Matter of Arbitration; Different Methods of Arbitration; Arbitration Tribunal; Arbitral Proceedings; Arbitral Award; Appeals.

## 5. The Trademarks Act, 2009: [ILO 5]

Registration Procedures and Duration; Effects of Registration; Use of Trademark.

## 6. The Competition Act, 2012: [ILO 5]

Definitions; Formation of Bangladesh Competition Commission; Anti-Competition Contract; Grievances; Enquiry and Order; Re-Consideration, Penalty and Appeal; Financial Aspects of the Commission.

## 7. The Partnership Act, 1932: [ILO 6]

The Nature of Partnership; Relations of Partners to One Another; Relations of Partners to Third Parties; Incoming and Outgoing Partners; Dissolution of a Firm; Registration of Firms.

#### 8. The Bangladesh Labor Act, 2006: [ILO 6]

Employment of Young Persons; Health, Hygiene, Welfare; Safety; Working Hours, Leave and Holidays; Wages Board; Trade Union and Industrial Relations; Dispute Resolution; Labor Court; Labor Appellate Tribunal; Workers' Profit Participation; Provident Fund; Offence and Penalty.

## 9. The Bank Company Act, 1991: [ILO 7]

Business of and Licensing of Bank Companies; Paid up Capital and Reserves; Appointment and Removal of Directors and Chief Executive Officer; Illegal Bank Transactions by Companies etc.; Acquisition of the Undertaking of Banking Companies; Suspension of Business and Winding up of Bank Companies; Restriction on Loans and Advances; Issuance of Policy Directions; Remission of Loans; Operation and Management; Inspection and Investigation.

## 10. The Insurance Act, 2010: [ILO 7]

Evolution of Insurance Laws in Bangladesh; Statutory Definitions; Classification of Business and Policies; Registration and Renewals; Determination of Premium Rates; Capital and Deposits; Margin of Safety; Insurable Interests; Investment of Assets; Solvency Margin; Loans and Management; Investigation and Power of Regulatory Authority; Assignment and Transfer of Policies; Licensing of Agents; Survey and Surveyors.

## 11. The Financial Institutions Act, 1993: [ILO 7]

Licensing of Financial Institutions; Minimum Capital, Reserve Fund and Liquid Assets; Restriction on Credit Facilities; Investment.

## 12. The Securities and Exchange Commission Ordinance, 1969: [ILO 8]

Issue of Capital; Registration and Regulation of Stock Exchanges; Regulation of Issuers Prohibitions and Restrictions; Enquiries, Penalties, Orders and Appeals; Miscellaneous.

#### 13. The Securities and Exchange Rules, 1987: [ILO 8]

Qualification, etc., of Members of Stock Exchange; Maintenance of Accounts and Audit; Maintenance of Books of Account, etc. by Members; Listing of a Security; Submission of Annual Report by Issuers; Risk-based Capital Adequacy Requirements.

#### 14. The Exchanges Demutualisation Act, 2013: [ILO 8]

Process of Converting a Mutualized Exchange into a Demutualized One; Issuance of TREC (Trading Right Entitlement Certificate); Operations and Management of a Demutualized Exchange.

#### **Recommended Textbooks:**

- 1. Khan, A. A. Labour and Industrial Law.
- 2. Sen, A. K. and Mitra, J. K. Commercial & Industrial Law (World Press).
- 3. Arbitration Act, 2001
- 4. Bankruptcy Act, 1997
- 5. Bangladesh Labor Act, 2006
- 6. The Bank Companies Act, 1991
- 7. Contract Act, 1872
- 8. Financial Institutions Act 1993
- 9. Insurance Act, 2010
- 10. Negotiable Instruments Act, 1881
- 11. Partnership Act, 1932
- 12. Sale of Goods Act, 1930
- 13. Stamp Act, 1899
- 14. Securities and Exchange Commission Ordinance, 1969
- 15. Securities and Exchange Rules, 1987
- 16. Trademarks Act, 2009
- 17. Exchanges Demutualisation Act, 2013
- 18. http://bdlaws.minlaw.gov.bd/

## THIRD YEAR SECOND SEMESTER

#### 3201: Forensic Accounting and Fraud Investigation

#### **Course Objectives:**

This course is intended to develop skills concerned with prevention, detection, and correction of financial frauds occurring in corporate transactions. Upon completion of this course, the students will learn skills in forensic accounting, fraud examination, quantitative methods relating to detection of accounting fraud, certain areas of criminal law, evidence law and investigative skills to collect, analyze, and evaluate evidential matter and to interpret and communicate findings regarding forensic audit. Students will also learn to analyze possible consequences of fraud, determine damages, valuation of assets and liabilities, and evaluate effects of cyber-crime on an organization.

## **Intended Learning Outcomes (ILOs):**

Upon successful completion of this course, students will be able to:

- 1. Understand the criminal law, legal system, potential red flags of white-collar crime, financial statement fraud.
- 2. Understand different types of accounting crime.
- 3. Understand fraud investigation planning and implementation process.
- 4. Understand evidence and evidence gathering process in a legal framework.
- 5. Understand money laundering process, laws, detection and prevention technique.
- 6. Understand cyber-crime and its prevention technique in organizations.

#### **Detailed Course Contents:**

#### 1. Introduction to Fraud and Forensic Accounting: [ILO 1]

Introduction to Crime; Actus Reus and Mens Rea; Legal System of a Country; Taxonomy of Crime; Conceptual Framework of the Fraud Deterrence cycle; Definition of Forensic Accounting; Historical Perspective of Forensic Accounting; Difference between Forensic Accounting and External Auditing; Emergence of Forensic Accounting; Controversy surrounding the Accountant's role in fraud detection and handling; How to become Forensic Accountants; Forensic Accountant's investigative role, Different dimensions of Forensic Accounting; Required knowledge, skills and abilities of Forensic Accountant.

#### 2. Potential Red Flags and Fraud Detection Techniques: [ILO 1]

Fraud; Types of Frauds; Occupational Fraud; Fraud Detection; Assessing the risks of frauds; Interpreting potential red flags; Fraud Triangles; The social consequences of economic crime; Identifying and evaluating risk factors; Identifying Techniques-Analytical Procedures, Observation and Inspection; Financial Statements Fraud Detection Techniques.

#### 3. Financial Statement Fraud: Revenues and Receivables: [ILO 2]

Revenue Recognition Principle; Improper Revenue Detection techniques; Improper Revenue Recognition Detection Techniques; Related part Transactions; Detection of Receivables Misappropriations.

#### 4. Financial Statement Fraud: Assets, Liabilities and Expenses: [ILO 2]

Types of Assets Misstatements; Detection Techniques of Misappropriated Assets; Understatement of Liabilities and Expenses; Employee Fraud; Off-Balance Sheet transactions; Disbursement Schemes; Expenses Reimbursement Schemes; Payroll Schemes.

#### 5. Teaming with Forensic Accounting Investigators: [ILO 3]

Scope of Internal Audit; Role of Internal Audit to detect Complex Corporate Fraud; Forensic Accounting Investigators' cooperation with internal auditors; Forensic Accounting Investigators' cooperation with external auditors.

## 6. Investigative Techniques: [ILO 3]

Case initiation and evaluation; Solvability Factors; Goal setting and planning; Investigation; Timing of Investigation; Understanding the Entity; Document Review; Development and Implementation of the investigative strategy; Prioritize of allegations; interviewing the Financially sophisticated Witness and employees; Documenting the Interview.

## 7. Analyzing the Financial Statements: [ILO 3]

Horizontal Analysis; Vertical Analysis; Ratio Analysis; Reasonableness Test; Data Mining through Computer Aided Investigation Techniques; Other Analytical Tools; Identifying the signs of Earnings Management. Benfold Law Technique.

## 8. Analysis Tools for Investigators: [ILO 3]

Importance of Analysis; Associational Analysis; Temporal Analysis; Inferential Analysis; Investigative Inference Analysis; Constructing an Investigative Inference Chart; Applying Chart for the investigative process.

## 9. Data Mining: Computer-Aided Forensic Accounting Investigation: [ILO 3]

Meaning of Data Mining; Effective Data Mining procedures; Data Cleaning; Eliminating Duplicate Information; Effective Use of Data Analysis Results; Data Sorting.

## 10. Evidence: [ILO 4]

The Evidence Act, 1872; Meaning of Evidence; Fact in Issue, Characteristics of Evidence - Relevance, Admissibility, Reliable; Types of Evidence – Documentary Evidence, Real Evidence, Testimony, Circumstantial Evidence, Hearsay as Evidence; Beyond Reasonable Doubt Standard; Document collection and organization; Critical Steps of Gathering Evidence; Management of evidence; Burden of Proof.

## 11. Money Laundering: [ILO 5]

Money Laundering Prevention Act, 2012; Meaning of Money Laundering; Laundering Process — Placement, layering, Integration; Reporting Entity; Predicate Offence; Relationship between Fraud and Money Laundering, Varying the Impacts of Money Laundering on Companies, Impact of Money Laundering on Financial Statements, Anti-Money Laundering and Forensic Accounting Investigation; Offence of Money Laundering and Punishment; Investigation and Trial; Bangladesh Financial Intelligence Unit (BFIU) and its functions.

## 12. Cyber-crimes: [ILO 6]

Definition of cyber-crime; Profiling the cyber-criminals; The auditor's role in computer forensics; Management of cyber-crime: Criminality of cyber-crimes; cyber-crime statutes; Guidelines for cyber-crime management.

## **Recommended Textbooks:**

- 1. Manning, G. A. Financial Investigation and Forensic Accounting, (Routledge).
- 2. Singleton, T. W. and Singleton, A. J., *Forensic Auditing and Forensic Accounting*. (John Wiley and Sons, Inc.)

## **Reference Materials:**

- 1. Money Laundering Prevention Act, 2012.
- 2. The Evidence Act, 1872.
- 3. Crain, M. A., Hopwood, W. S., Pacini, C. and Young, G. R. *Essentials of Forensic Accounting*. NJ: JW.
- 4. Thomas, W.G., Skalak, S. L. and Clayton, M. M., *A Guide to Forensic Accounting Investigation*, (John Wiley & Sons, Inc.)

- 5. Pedneault, S., Rudewicz, F., Sheetz, M. and Silverstone, H. *Forensic Accounting and Fraud Investigation*, (John Wiley & Sons).
- 6. Crumbley, D. L., Heitger, L. E. and Smith, G. S. *Forensic & Investigative Accounting*, Chicago: USA.
- 7. Crumbley, D. L. *Case Studies in Forensic Accounting and Fraud Auditing*. Chicago, CCH, USA.
- 8. Joseph, T. W. Principles of Fraud Examination, New Jersey: (John Wiley & Sons).

#### 3202: Corporate Finance

#### **Course Objectives:**

This course is designed to introduce the fundamental concepts of corporate finance decision making with reference to investment, financing and dividend decision. The course is a blend of theory in corporate finance and practice related to specialized tools for solving real world financial problems at both the individual and corporate level. The course will elaborate on the techniques of capital investment decision and financial decision making under uncertainty, corporate capital structure, valuation of the levered firm, dividend and other payouts decision, working capital management along with the introduction of international corporate finance.

#### Intended Learning Outcomes (ILOs):

Upon completion of the course, students should be able to:

- 1. Understand the scope of corporate finance, major decision areas that confront corporate finance manager, possible goals of the firm, problems arising from agency relationship, and regulations affecting the functions of corporate finance manager including corporate governance.
- 3. Demonstrate the procedures for determining relevant cash flows for capital investment decisions and explain how risk of a potential investment can be addressed by using different techniques.
- 4. Discuss the impact of leverage on firm's value, risk and return, and understand the implication of Modigliani-Miller theory of capital structure in a world with and without tax.
- 5. Describe how the costs associated with financial distress affect capital structure decisions and explore the questions raised by the agency cost/tax shield trade-off model of corporate leverage.
- 6. Apply APV, FTE and WACC methods for valuation and capital budgeting of levered firm.
- 7. Discuss the fundamentals of dividend, the arguments for dividend relevance or irrelevance, different types of dividend policy and the factors affecting a firm's dividend or retention policy.
- 8. Explain the importance and approaches of current asset and current liability management for the attainment of corporate goals.

9. Understand the risks of foreign investment, the types of exchange rate exposure, factors affecting exchange rate movement and the fundamental corporate finance functions in an international setting.

## **Detailed Course Contents:**

## 1. Introduction to Corporate Finance: [ILO 1]

Definition of Corporate Finance, Corporate Finance Decisions, Legal Forms of Business Organization, The Goals of Corporate Finance Manager, The Agency Problem and Control of the Corporation, Regulation and Corporate Governance, Financial Markets and the Corporation, Financial Statements Analysis, Financial Planning Models, Determinants of Growth, Caveats of Financial Planning Models.

## 2. Capital Investment Decisions and Risk Analysis: [ILO 2]

Capital Investment Evaluation Methods, Incremental or Relevant Cash Flows, Estimating Investment and Operating Cash Flows, Special Cases of Discounted Cash Flow Analysis, Capital Rationing, Inflation and Capital Investment Decisions, Capital Investment Decisions Under Risk, Sensitivity Analysis, Scenario Analysis and Break-Even Analysis, Real Options, Decision Trees.

## 3. Capital Structure Decisions: [ILO 3, ILO 4]

Financing Decision and Firm Value, Efficient Capital Markets, Different Types of Market Efficiency, Operating Leverage, Financial Leverage and Total Leverage, Impact of Leverage on Firm Value and Risk, Modigliani and Miller (MM) Theory of Capital Structure: Proposition I and II, Capital Structure and Cost of Capital, Limits to the Use of Debt, Financial Distress Costs, Agency Cost of Debt, Integration of Tax Effect and Financial Distress Costs, Debt Signaling Hypothesis, Agency Cost of Equity, The Pecking-Order Theory, How Firms Establish Capital Structure.

## 4. Valuation and Capital Budgeting for the Levered Firm: [ILO 5]

Adjusted Present Value Approach, Flow to Equity Approach, Weighted Average Cost of Capital Approach, A Comparison of APV, FTE and WACC Approach, Estimation of the Discount Rate for Valuation, Beta and Leverage.

## 5. Dividend and Other Payouts Decisions: [ILO 6]

Different Types of Payouts, Standard Method of Cash Dividend Payment, Dividend Relevance Theory, Walter and Gordon Model, Modigliani and Miller (MM) Dividend Policy Irrelevance Theory, Repurchase of Stock, Taxes, Dividend and Stock Repurchases, Factors Affecting Dividend Policy, Different Types of Dividend Policy, Dividend Signaling Hypothesis, Information Content of Dividend, Clientele Effect, Stock Dividends and Stock Splits.

## 6. Working Capital Management: [ILO 7]

Concepts of Working Capital, Importance of Working Capital Management, Factors Determining Working Capital, Hedging, Aggressive and Conservative Approach to Working Capital Financing, Estimating Working Capital Requirements, Cash and Marketable Securities Management, Receivable Management and Credit Policy, Inventory Management, Short-term Financing Management.

## 7. International Corporate Finance: [ILO 8]

Domestic versus Foreign Investment, Foreign Exchange Markets, Transactions and Participants, Different Types of Exchange Rates, International Monetary System,

Trading in Foreign Exchange, Factors Influencing Exchange Rates, Purchasing Power Parity, Interest Rate Parity, The International Fisher Effect, International Capital Budgeting, Capital Structure and Working Capital Management, Political Risk.

#### **Recommended Textbooks:**

1. Ross, S. A., Westerfield, R. W., Jaffe, J. and Jordan, B. D. *Corporate Finance*. (McGraw-Hill Publication).

#### **Reference Materials:**

- 1. Brealey, R. A., Myers, S. C. and Allen, F. *Principles of Corporate Finance*. (McGraw-Hill Education).
- 2. Berk, J., DeMarzo, P. and Harford, J. Fundamentals of Corporate Finance. (Pearson).

#### **3203:** Accounting Information Systems

#### **Course Objectives:**

The main objective of this course is to teach students the essentials of an effective information system, which facilitates processing of accounting data and preparation of financial information. The course will discuss a whole range of AIS topics which include basic definitions, details of data processing, flowcharting and database management. After successful completion of the course, the students will be able to work in a team situation, where they will be able to design accounting information systems; to understand the primary information flows within business environment; and to understand various transactions cycles and basic accounting records in computer-based system. This will further enhance a basic understanding of ethical issues related to the use of information technology and the implications of computer technology on the internal control structure.

#### Intended Learning Outcomes (ILOs):

Upon successful completion of this course, students are expected to:

- 1. Know about computerized Accounting Information Systems.
- 2. Be able to identify business processes and transaction cycles.
- 3. Successfully perform documentation at the organization.
- 4. Understand the concepts of Internal Control and IC Framework.
- 5. Comprehend the importance and implication of IT Governance.
- 6. Know the basics of Information System Audit.
- 7. Be able to attempt designing and implementing an AIS from scratch.
- 8. Ensure the security of the AIS and protect against fraud.
- 9. Be able to operate basic features of Accounting Packages/ERP Systems.

#### **Detailed Course Contents:**

## PART A: Theory (50%)

## 1. The Information System: [ILO 1]

An Accountant's Perspective; the Information Environment; the Framework of AIS and the Various Sub Systems; Organizational Structure; the Role of the Accountant; Accounting Information Systems; AIS and MIS; Accounting as a System; Users of Accounting Information System; Management Structure Information Technology and Corporate Strategy; the AIS and Corporate Strategy; How AIS can Add Value to an Organization; Models of Decision Making; Human Aspect of the AIS; Transaction Processing; Computer Hardware and Software in AIS; Computerized Accounting Systems; Tools to Implement Accounting System.

## 2. Introduction to Transaction Processing: [ILO 2]

An Overview of Transaction Processing; Transaction Cycles: Expenditure Cycle; Accounting Record Keeping; Audit Trail; Chart of Accounts; Different Methods Coding; Documentation Techniques; Computer Based Accounting Systems.

## 3. Documenting AIS: [ILO 3]

Importance of Documentation; Document Flow Charts; Guidelines for Drawing DFC; System Flow Chart & DFD; System FC & Guidelines; Program FC; Decision Table; Case Tool.

## 4. Ethics, Fraud, and Internal Control: [ILO 4, ILO 8]

Ethical Issues in Business; Fraud and Accountants; Internal Control Concepts and Procedures; COSO Framework; Assessing and Managing Risk Related to AIS; Computer Fraud and Security; Auditing; Computer-Based Information Systems.

## 5. Revenue and Expenditure Cycles: [ILO 2]

Overview of the Manual Revenue System and Study of CBAS; Study of the Sales and Purchases Sub Systems of an Organization; Overview of Purchases and Cash Disbursements; Computer Based Purchases and Cash Disbursements; Payroll Activities; Computerized Payroll System; Threats, Exposures and Control Procedures in the Revenue and Expenditure Cycles.

## 6. General Ledger, Financial Reporting, and Management Reporting Systems: [ILO 2]

Data Coding Systems; Financial Reporting Systems; Management Reporting Systems; Threats; Exposures and Control Procedures in the Revenue and Expenditure Cycles.

7. Strategic Decisions: [ILO 5] DSS; AIS and AI/ES: AIS in Corporate Planning; Decision Support System (DSS); Artificial Intelligence (AI) and Expert Systems Operation and Evaluation.

## 8. Systems Organizations, Development, and Management: [ILO 7] Approaches to System Development; AIS Development Strategies; System Development Life Cycle (SDLC).

## 9. Designing and Implementing Systems: [ILO 7]

System Acquisition Methodology; Investigation and Feasibility Study; Requirements Analysis and Initial Design; System Design; Selection; Acquisition and Development; Systems Implementation; System Maintenance and Program Changes; Project Management: Planning, Control Methods, and Standards.

## 10. Controls and Standards: [ILO 4]

Control Environment; System Acquisition Process and Controls; Risk Assessment Processes and Activities; Information System Processing Operations and Controls; Monitoring Processes and Activities; Controls Over Personal Systems.

## 11. Information Security: [ILO 5, ILO 8]

Importance of Security; Security of Computer Hardware and Software; Data Security; Network and Web Security; Malicious Software; Hackers and Cyber Vandalism; Computer Crime and Cyber Terrorism.

## PART B: Practical (50%)

#### 1. Historical Development of Accounting Packages & ERP Systems: [ILO 1]

#### 2. Introduction to Modern Accounting Packages: [ILO 9]

- Practical Demonstration of Contemporary Accounting and Business Software.
  Suggested Packages: Tally Prime, QuickBooks, Xero etc.
- Features of an Accounting Package
- Making Chart of Accounts; General Ledger; Payables: Vendors, Purchase, Payments; Receivables: Customers, Sales Receivables.
- Maintaining Payroll
- Inventory Management
- Point of Sales (POS)
- Reporting
- Miscellaneous
- 3. Project:
  - i. Accounting Information System / ERP design and development (use of ERD, DFD, Designing an AIS)
  - ii. Project based on practical demonstrations of contemporary accounting and business package.

#### **Recommended Textbooks:**

- 1. Romney, M. B. and Steinbart, P. J. Accounting Information Systems (Prentice Hall).
- 2. Wilkinson, J. W., Cerullo, M. J., Raval, V. and Wong-On-Wing, B. Accounting *Information Systems* (John Wiley & Sons).
- 3. Moscove, S., Simkin, M. and Bagranoff, N. Core Concepts of Accounting Information Systems (John Wiley & Sons, Inc.).
- 4. Gelinas, Jr. U. J. and Dull, R. B. Accounting Information Systems (Thomson South-Western).
- 5. Hall, J. A. Accounting Information Systems (South-Western Cengage Learning).
- 6. Rahman, M. and Halladay, M. Accounting Information Systems: Principles: Applications and Future Directions (Prentice Hall Inc.).
- 7. Laudon, K. C. and Laudon, J. P. *Management Information Systems: Managing the Digital Firm* (Prentice Hall)

#### Mark Distribution for this Course:

Criteria	Allocated Mark	Result Segments
Mid Term / In-course Examination-1	15	Continuous
(Theory)		Assessment (40%)
Mid Term / In-course Examination-2	15	
(Practical in Lab)		
Quizzes/Term Paper/Assignments/Class	10	
Attendance		
Semester Final (Theory)	30	Final (60%)
Semester Final (Practical in Lab)	30	
Total	100	

#### 3204: VAT and Cross Border Taxation

## **Course Objectives:**

The objective of the first part of this course is to give an idea about concepts and principles of VAT, Custom Duty, and income tax of international transactions. It will also contribute to the understanding of the nature of public finance and its sources along with the areas of public income and expenditure with the practical exposure (Budget) and evaluating a good taxation policy.

## Intended Learning Outcomes (ILOs):

Upon completing this course, students will be able to:

- 1. Understand VAT and SD calculation.
- 2. Maintaining Books of Accounts for VAT and SD.
- 3. Understand international income taxation.
- 4. Understand transfer pricing and its implication.
- 5. Understand international trade process.
- 6. Understand Customs Duty assessment.
- 7. Evaluate a fiscal policy of the government.

## **Detailed Course Contents:**

1. Value Added Tax (VAT) and Supplementary Duty: [ILO 1] History of VAT ; Statutory Definitions as per the VAT Act; Evolution and Economic Rationality of VAT; VAT Registration; Imposition of VAT; Application of Tax Rate; VAT Base ; Method and Time of Payment of VAT; Truncated Value (Truncated Rate of VAT, VAT on certain services on Estimated Value Addition); VAT Deducted at Sources; VAT Authorities; Turnover Tax (Concept of Turnover Tax; Enlistment for Turnover Tax; Payment of Turnover Tax; Books and Documents to be Maintained for Turnover Tax; Penalty for False Declaration for Turnover Tax; Differences between VAT and Turnover Tax); Input Tax; Supplementary Duty; Consequences of Non-compliance; VAT Administration; Appointment; Delegation of Authorities and Powers; Appeal; Revisions and Recovery of Claims.

## 2. VAT Accounting: [ILO 2]

Books and Documents Required to be Maintained for VAT accounting; VAT 4.3 – Input Output Coefficient, VAT 6.1 Purchase Book, VAT 6.2- Sales Book, VAT 6.2.1 –Purchase and Sales Book, VAT 6.3 – Sales Invoice, VAT 6.4 – Invoice for Contract Manufacturing, VAT 6.5 – Invoice for Transfer of Goods; VAT 6.6 –VDS Certificate , VAT 6.7 – Credit Note, VAT 6.8 Debit Note, VAT 9.1 - VAT Return, VAT recording in the Financial Accounting System.

## 3. Income Tax on Cross Border Transactions: [ILO 3]

Section 144 of Income Tax Ordinance 1984, TDS of Non-residents (Section 56 of ITO 1984), Economic Double Taxation, Juridical Double Taxation, Double Tax Avoidance Agreement (DTTA), UN DTTA Model Vs. EU DTTA Model, Relief in respect of Income Arising outside Bangladesh; Methods of Avoiding Double Taxation. Section 102. Liability to tax in case of shipping business of non-residents; Section 103A. Liability to tax in case of air transport business of non-residents; Section 104. Avoidance of tax through transactions with non-residents; Section 107. Tax clearance certificate required for persons leaving Bangladesh; Permanent Establishments (PE), Liaison Office Vs. PE; EU BEPS Provision, Hybrid Mismatch, Thin Capitalization.

## 4. Transfer Pricing Rules: [ILO 4]

CUP Method, Resale Method, Cost Plus Method, Profit Split Method, TNMM Method; Section 107B: Determination of income from international transaction having regard to arm's length price; Section 107C- Computation of arm's length price. Section 107D-Reference to Transfer Pricing Officer. Section 107E. Maintenance and keeping of information, documents and records; Section 107EE. Statement of international transactions to be submitted; 107F. Report from an accountant to be furnished. Section 107G - Penalty for failure to keep, maintain or furnish information, documents or records to the Deputy Commissioner of Taxes. Section 107H. Penalty for failure to comply with the notice or requisition under section 107E; Section 107HH- Penalty for failure to furnish report under section 107F.

## 5. International Trade and Tax: [ILO 5]

Process of International Trade; Absolute Advantage and Competitive Advantage, Gaining from Trading; Importance of Import and Export, International Trade Barriers, Qualitative and Quantitative barriers of international trade; WTO rules. HS Code; Import Export Documentations – Pro-forma Invoice, LC, Bill of Lading, Airway Bill, Bill of Entry.

## 6. Customs Duty: [ILO 6]

Goods Dutiable; Goods Prohibited; Various Duties under the Customs Act; Rates of Duties; Tax Points and Valuation Bases for Customs Duty; Duty-Drawback and Exemptions; Pre-Shipment Inspection Agencies; Assessment; Penalties and Offences; Schedules.

#### 7. Evaluation of Fiscal Policy: [ILO 7]

Market and its function in allocation of resources; Two fundamental principles of Welfare Economics; Market Failure; Positive and Negative Externalities; Public Goods, Free riding; Taxation Principles and Its Incidence; Factors determining the distribution of tax burdens; Tax incidence in factor markets; General equilibrium tax incidence; Taxation and Economic Efficiency; Effects of taxes borne by consumers; Effects of taxes borne by producers; Effects of taxes on labor supply. Tax Inefficiencies and Their Implications for Optimal Taxation; Taxation and economic efficiency; Optimal commodity taxation; Optimal income taxes; Budget, Balanced Budget, Deficit Budget, Surplus Budget.

## **References Materials:**

- 1. Rosen, H. S. and Gayer, T. Public Finance, (McGraw-Hill), Boston.
- 2. Musgrave, R. A. and Musgrave, P. B. *Public Finance in Theory and Practice* (McGraw-Hill Book Company).
- 3. Chowdhury, D. *Advanced Issues in Taxation: Theory and Practices*, (Grantha Kutir), Dhaka.
- 4. Customs Act 1969.
- 5. Value Added Tax and Supplementary Duty Act 2012
- 6. Excise and Salt Act 1944.
- 7. Land Development Tax Ordinance 1976
- 8. Income Tax Ordinance 1984
- 9. Stamp Act 1899
- 10. Latest Finance Act.

#### 3205: Corporate Laws, Governance and Secretarial Practices

#### **Course Objective:**

This course aims to develop a sound understanding of the company's law of the country, including the corporate governance aspects relating to shareholders, the board of directors, management, and other stakeholders of organizations. Besides, this course intends to explain the essential aspects of secretarial practice within organizations so that it helps the students to identify and evaluate the good governance practice and discharge regulatory compliances as a company secretary. This course focuses to develop working knowledge among the students regarding the company act, governance regulations and the secretarial practices.

#### Intended Learning Outcomes (ILOs):

Upon completion of this course, students will be able to:

- 1. Get a background of the company law in the country and aware of the principal documentations to establish a company.
- 2. Aware of with the company registration.

- 3. Understand the management, and administration of company, including required books of records.
- 4. Know about the winding-up process of company.
- 5. Understand the concept of corporate governance and its framework.
- 6. Aware of corporate governance mechanisms.
- 7. Be informed about the corporate governance reforms.
- 8. Understand corporate ethics.
- 9. Understand the role of company secretary.
- 10. Know about various meetings and process of the meeting in organization.
- 11. Know about the provisions for appointment of statutory auditor and corporate governance auditor; and
- 12. Aware of various corporate reporting issues as a part of corporate governance.

#### **Detailed Course Contents:**

#### Corporate Laws and Governance (Weight 80%)

1. Overview, Constitution and Incorporation: [ILO 1]

Background and Evolution of Company Law in Bangladesh; Statutory Definitions under the Companies Act 1994; Memorandum of Association (MoA); Articles of Association (AoA); Companies Limited by Guarantee.

2. Share Capital and Registration: [ILO 2]

Distribution of Share Capital; Reduction of Share Capital; Variation of Shareholders' Rights; Registration of Unlimited Company as Limited; Reserve Capital of Limited Company; Unlimited Liability of Directors.

3. Management, Administration and Books of Records: [ILO 3]

Meeting and Proceedings: Annual General Meeting, Statutory Meeting, Extraordinary General Meeting, Board Meeting; Provision for Vote; Appointment of Directors; Duties of Directors; Disqualification of Directors; Removal of Directors; Disqualification; Vacation of Office of Director; Loan to Director; Director not to hold the Office of Profit; Conflicts of Interest; Penalties; Offences Return of Allotment; Balance Sheet; Profit and Loss Accounts; Authentication of Balance Sheet and Profit and Loss Accounts; Right of Members to Copies of Account and Report.

4. Winding Up: [ILO 4]

Mode of Winding Up; Winding Up by Court; Voluntary Winding Up; Winding Up by Creditors.

5. Corporate Governance (CG) Concept and Conceptual Framework: [ILO 5]

Definition of CG; Importance of CG; Theoretical Frameworks: Agency Theory, Stewardship Theory, Transaction Cost Economics, Stakeholder Theory, Resource Dependence Theory, Theory of Managerial Hegemony; CG Systems: Insider System, Outsider System; CG Elements: Internal Mechanisms, External Mechanisms.

## 6. Corporate Governance Mechanisms: [ILO 6]

Formation of Board of Directors; Size of the Board of Directors; Role of the Board of Directors; Types of BoDs; Women Representation in the Board of Directors; Power & Duties of Directors; Proceedings of Directors; Splitting the Role of Chairman and Chief Executive Officer; Board Committees: Audit Committee, Nomination

Committee, Remuneration Committee; Training and Orientation of Board Members; Performance Evaluation of BOD; Internal Control: Definition of Internal Control, Components of Internal Control Systems; Limitations of Internal Control System; Assessing the Role of Internal Audit; Ownership Structure. External Mechanisms: Monitoring by Blockholders and Analysts, External Auditors; Competition and Takeovers; Regulation and Enforcement.

## 7. Corporate Governance Reforms: [ILO 7]

"Shareholder Led" ("Principles Based") or "Regulator Led" ("Rules Based") Approach to CG; Global Best Practices of CG: OECD Principles, SAFA Best Practices, UNCTAD Disclosure Requirements; CG Reforms in Bangladesh; Voluntary Code of BEI; CG Guidelines of the BSEC: Contents and Implementation Status of CG Guidelines.

#### 8. Corporate Ethics: [ILO 8]

Corporate Ethics vs. Corporate Responsibility; Promoting and Reinforcing Corporate Ethical Culture; Ethical Norms; Ethical Behavior and Internal Governance Mechanisms; Ethical Leadership from BOD; Code of Ethics; Whistle Blowing Policies and Procedures to Support Ethical Behavior; Ethical Audit.

#### Secretarial Practices (Weight 20%)

#### 1. The Role and Authority of Company Secretary: [ILO 9]

Need for the Importance of Company Secretary; Qualifications of a Company Secretary; Independence of Company Secretary; Appointment of Company Secretary; General Provisions; Developing Corporate Governance Policies and Best Practices; Legal & Organizational support of the Board of Directors; Protecting Shareholder Rights; Disclosures and Transparency.

#### 2. The Meeting Processes: [ILO 10]

Convening of Meeting (Annual General Meeting, Statutory Meeting, Extraordinary General Meeting, Board Meeting); Frequency of Meeting; Quorum; Attendance at Meetings; Chairman; Passing of Resolution by Circulation; Minutes; Preservation of Minutes and Other Records; Share Transfer and Transmission; AGM/EGM; Meeting through Tele/Video Conferencing

#### 3. Appointment of Statutory Auditor: [ILO 11]

Appointment, Removal, Remuneration of the Statutory Auditor as per Companies Act 1994; Scope of Audit; Duties and Rights of Auditors.

#### 4. Appointment of CG Auditor: [ILO 11]

Appointment of Corporate Governance Auditor as per CG Code.

#### 5. Corporate Reporting: [ILO 12]

Director's Report as per Companies Act, 1994; Submission of return to RJSC&F; Disclosure on Price Sensitive Information (PSI); Disclosure on the Appointment or Reappointment of Directors; Declaration or Certification by the CEO and the CFO to the Board on Financial Statements for the Year Ended; IPO Issue in accordance with Bangladesh Securities and Exchange Commission (Public Issue) Rules, 2015. BSEC Notification on 20 June, 2018.

#### **Recommended Textbooks:**

- 1. Mallin, C. A. Corporate Governance. (Oxford University Press).
- 2. Du Plessis, J. J. Hargovan, A. and Harris, J., *Principles of Contemporary Corporate Governance*. (Cambridge University Press).
- 3. Solomon, J. Corporate Governance and Accountability. (John Wiley & Sons Ltd.)
- 4. Chowdhury, D. Incentives, Control, and Development: Governance in Private and Public Sectors with Special Reference to Bangladesh (The University Press Ltd.).
- 5. Chowdhury, D. Knowledge and Competitiveness in Elite Institutions in Bangladesh: Implications for Governance, Dhaka University.

#### **Reference Materials:**

- 1. The Companies Act, 1994 (Act No. 14 of 1994).
- 2. *The Code of Corporate Governance*. Bangladesh Securities and Exchange Commission.
- 3. *Bangladesh Secretarial Standards*. Issued by the Institute of Chartered Secretaries of Bangladesh (ICSB).

## FOURTH YEAR FIRST SEMESTER

#### 4101: Advanced Management Accounting

#### **Course Objectives:**

The objective of this course is to enable students understand the advanced issues of management accounting. Particularly, students are expected to learn management accounting tools and techniques that would be relevant in complex business situations. Managers face the challenges of fourth industrial revolution. They need to learn how to tackle those challenges while making pricing, performance evaluation, cost management and other managerial decisions. This course is designed to fulfil this need.

#### **Intended Learning Outcomes (ILOs):**

Upon successful completion of this course, students will be able to:

- 1. Get acquainted with the traditions and innovations in management accounting.
- 2. Understand the concept of relevance and identify the factors that affect pricing decisions.
- 3. Use relevant information in various operational decision-making situations.
- 4. Understand what constitutes a segment in a firm and evaluate the performance of different segments.
- 5. Explain transfer prices and understand the relevance of transfer prices in managerial or divisional performance.
- 6. Evaluate the performance of individual, group or an entity through different accountingbased measures (ROI, RI, EVA, ROS etc).
- 7. Describe the components of cost of quality and prepare a quality cost report.
- 8. Control cost in the context of variety of constraints time and efficiency.

9. Know usage of data analytics in prediction and value creation.

10. Understand emerging issues related to digital technologies, governance and sustainability.

## **Detailed Course Contents:**

## 1. Traditions and Innovations in Management Accounting: [ILO 1]

An Overview of Conventional Management Accounting; Relevance Lost; Relevance Regained; Management Accounting in Post-Modern Era Business; Cost Management; Management Accounting Innovations.

## 2. Relevant Information for Decision Making with a Focus on Pricing Decisions: [ILO 2]

The Concept of Relevance; Decision Model; Major Factors that Affect Pricing Decisions; The Concept of Pricing: Perfect and Imperfect Competition; Market-Based Approach: Target Costing for Target Pricing; Cost-Plus Pricing; Non-Cost Factors in Pricing Decisions; Antitrust Laws and Pricing Decisions.

# **3.** Relevant Information for Decision Making with a Focus on Operational Decisions: [ILO 3]

Opportunity, Outlay and Differential Costs; Avoidable and Unavoidable Costs; Insourcing Versus Outsourcing; Make or Buy Decisions; Dropping or Continuing with a Segment; Optimal Use of Limited Resources; Special Sales Order; Keep or Replace a Machine/Equipment; Irrelevant or Misspecified Costs; Decisions and Performance Evaluation.

## 4. Responsibility Accounting and Segment Reporting: [ILO 4]

Decentralization and Corporate Segments; Traceable vs Common Fixed Costs; Segment Margin; Segmented Income Statements; Levels of Segmented Income Statements; Segmented Financial Information in External Reports.

## 5. Management Control Systems, Transfer Pricing, and Multinational Considerations: [ILO 5]

Management Control Systems: Nature and Type; Evaluating Management Control Systems; Decentralization and Transfer Pricing; Criteria for Evaluating Transfer Prices; Calculating Transfer Prices; Market-Based Transfer Prices; Cost-Based Transfer Prices; Negotiated Transfer Prices; Dual Transfer Pricing; General guideline for determining a minimum transfer price; Goal Congruence and Sub-optimality; How Multinationals Use Transfer Pricing to Minimize Their Taxes; OECD Guidelines on Transfer Pricing.

## 6. Performance Measurement, Compensation, and Multi-National Considerations: [ILO 6]

Financial and Nonfinancial Performance Measures; Accounting-Based Measures for Business; Approaches to Measuring Performance; Return on Investment (ROI) and DuPont Method; Residual Income (RI) Method; Economic Value Added (EVA) Method; Return on Sales (ROS); Balanced Scorecard; Choosing the Details of the Performance; Target Levels of Performance and Feedback; Performance Measurement in Multinational Companies; Role of Management Accountant in Designing a Reward System.

## 7. The Management and Control of Quality: [ILO 7]

Definition of Quality; Costs of Quality: Prevention Costs, Appraisal Costs, Internal Failure Costs and External Failure Costs; Measuring and Controlling Quality Cost; Distribution of Quality Costs; Quality Cost Reports; Uses of Quality Cost Information; International

Aspects of Quality: The ISO Standards.

## 8. Accounting, Time and Efficiency: [ILO 8]

Just-In-Time Systems; Enterprise Resource Planning (ERP) Systems; Backflush Costing; Managing Goods for Sale in Retail Organizations; Challenges in Estimating Stock-Related Costs and their Effects; Just-In-Time Purchasing; Stock Costs and their Management in Manufacturing Organizations; Theory of Constraints; Balanced Scorecards and Time-Based Measures.

## 9. Data Analytic Thinking and Prediction: [ILO 9]

Data Science Basics and Management Accounting; Outcome Prediction; Value Creation; Data Science Framework - Defining the Problem and the Relevant Data, Data Algorithms and Models, Refining the Decision Tree, Validating and Choosing Models, Evaluating Data Science Models.

## **10. Emerging Issues: Digital Technologies, Governance and Sustainability: [ILO 10]**

Digital technologies and accounting; The digitally advanced enterprise control loop; Enterprise governance; Environmental management accounting; Management accounting changes highlight managerial context.

## **Recommended Textbooks:**

- 1. Datar, S. M. and Rajan, M. V. Horngren's Cost Accounting: A Managerial Emphasis, (Pearson).
- **2.** Horngren, C. T., Sundem, G. L., Burgstahler, D. and Schatzberg, J. O. Introduction to Management Accounting, (Pearson).
- 3. Bhimani, A., Horngren, C. T., Datar, S. M. and Rajan, M. V. *Management & Cost Accounting*, (Pearson).

## **Reference Materials:**

- **1.** Garrison, R. H., Noreen, E. and Brewer, P. C. *Managerial Accounting*, (McGraw Hill India).
- **2.** Blocher, E., Juras, P. and Steven Smith. *Cost Management: A Strategic Emphasis,* (McGraw Hill).

#### 4102: Financial Market and Investment Analysis

#### **Course Objectives:**

The primary objective of this course is to develop a concrete understanding of the financial systems of Bangladesh and various investment analysis techniques. The course will provide a detailed discussion of the structure of the financial markets, the operation of the financial institutions, and the types of instruments traded in the financial markets. This course will also focus on the valuation and use of the major investment vehicles and strategies available in capital markets today. In particular, the course will consider how investors form and evaluate portfolios with instruments such as stocks, bonds and mutual funds. Although the ultimate objective will be to develop a conceptual and theoretical background upon which the students can expand their knowledge of the field of financial markets and investment, the topical treatment will be rather practically oriented.

## Intended Learning Outcomes (ILOs):

Upon completion of the course, students should be able to:

- 1. Describe the structure of financial systems, the types of financial markets, the types of securities traded within financial markets, and the role of financial institutions.
- 2. Explain the design features, functions, trading mechanism, regulation and governance of key securities markets.
- 3. Understand the major elements of the investment environment, and apply the theory of portfolio management in constructing and evaluating efficient portfolios of securities.
- 4. Compare different asset pricing models to explain the relationship between risk and expected asset returns.
- 5. Conduct macroeconomic, industry and company analysis for valuation of stock and formation of equity portfolio.
- 6. Discuss the fundamentals of bond analysis and bond portfolio management strategies.
- 7. Explain the characteristics, trading mechanism and valuation process of different types of derivative securities traded in the derivative market.

#### **Detailed Course Contents:**

#### PART A: Financial Market (40%)

## 1. Overview of the Financial System: [ILO 1]

Components of Financial System of Bangladesh, Financial Markets: Types, Structure and Functions, Internationalization of Financial Markets, Financial Intermediaries or Institutions: Types, Importance, and Functions, Securities Traded in Financial Markets, Regulators of the Financial System.

## 2. The Money Market: [ILO 2]

Definition of Money Market, Purpose of the Money Market, Participants of the Money Market, Regulator of the Money Market, Central Bank: Structure, Governance and Functions, Monetary Policy and Its Implications, Commercial Bank: Operations, Regulation, Management and Performance, Bank's Sources and Uses of Funds, Digital Banking, Islamic Banking, Non- Banking Financial Institutions (NBFI), Insurance Company, Types of Money Market Securities, Valuation of Money Market Securities, Globalization of Money Markets.

## 3. The Capital Market: [ILO 2]

Definition of Capital Market, Functions of the Capital Market, Participants of the Capital Market, Primary Market and Process for Issuing New Securities, Private Placement of Securities, Secondary Market and Trading Mechanism, Capital Market Instruments: Stock, Bond, Debenture, and Mutual Fund, Types and Characteristics of Stocks, Stock Market Transactions: Types of Order, Margin Trading and Short Selling, Stock Market Indexes, Regulation of Stock Trading, Over-the-Counter Markets, Alternative Trading Board, SME Platform, Bond Market, Types and Features of Bonds, Capital Market Intermediaries: Investment Banks, Issue Manager, Underwriter, Broker-Dealer, Pension Fund, Professional Fund Manager and Venture Capital Firms, Financial Innovation and FinTech, Regulators of the Stock Market: Bangladesh Securities and Exchange (CSE), Central

Depository Bangladesh Limited (CDBL), Central Counterparty Bangladesh Limited (CCBL).

4. Commodity Exchange, Mortgage Market, Asset-Backed Securities Market, Foreign Exchange Market, Derivative Security Market, Micro-Finance Institutions [ILO 2]

## PART B: Investment Analysis (60%)

#### 1. The Investment Environment: [ILO 3]

Definition of Investment, Measures of Return and Risk, Determinants of Required Rate of Return, Relationship between Risk and Return, Real Assets and Financial Assets, Financial Markets and the Economy, Investment Management Process, Investment Policy Statement, Investments in a Global Market.

#### 2. An Introduction to Portfolio Theory and Practice: [ILO 3]

Definition and Measurement of Risk and Return, Probability Distribution, Expected Return and Variance of Return, Risk Aversion, Mean Variance Portfolio Theory, Measuring Portfolio's Expected Return and Risk, Portfolios of One Risky Asset and a Risk-Free Asset, Diversification and Portfolio Risk, Portfolios of Two Risky Assets, Asset Allocation with Stocks, Bonds and Bills, The Markowitz Portfolio Optimization Model, Minimum Variance Portfolio, The Efficient Frontier and Investor Utility, Techniques for Calculating the Efficient Frontier, Evaluation of Portfolio Performance, Composite Portfolio Performance Measures, Performance Attribution Analysis, Factors Affecting the Use of Performance Measures.

#### 3. Asset Pricing Models: [ILO 4]

An Overview of Capital Market Theory, The Capital Asset Pricing Model (CAPM), Assumptions of CAPM, Systematic and Unsystematic Risk, Deriving the Capital Market Line (CML) and Security Market Line (SML), Empirical Tests of CAPM, Theory and Practice of Market Portfolio, Arbitrage Pricing Theory (APT), Multifactor Models of Risk and Return, The Fama-French (FF) Three-Factor Model, The Efficient Market Hypothesis (EMH), Alternative Forms of the EMH, Implications of the EMH, Empirical Tests of the EMH.

## 4. Stock Analysis and Equity Portfolio Management: [ILO 5]

Global and Domestic Macroeconomic Analysis, Business Cycle and Industry Analysis, Company Analysis and Stock Valuation, Fundamental Analysis, Technical Analysis, Active Equity Portfolio Management Strategies, Passive Equity Portfolio Management Strategies, Value versus Growth Investing Strategies, Style Analysis, Asset Allocation Strategies, Performance Evaluation of Portfolio Managers.

#### 5. Bond Analysis and Portfolio Management: [ILO 6]

Bond Fundamentals: Bond Characteristics, Types of Bond, Bond Pricing, Bond Price Volatility, Bond Yields and Bond Ratings, Determinants of Bond Interest Rate, The Yield Curve and Future Interest Rates, Theories of the Term Structure of Interest Rates, Managing Interest Rate Risk, Bond Portfolio Management Strategies: Passive Management Strategies, Active Management Strategies, Core-Plus Management Strategies, Matched-Funding Management Strategies, Contingent and Structured Management Strategies.

#### 6. Derivative Security Analysis: [ILO 7]

An Overview of Derivative Markets and Securities, The Option Contract, Call Option and Put Option, Payoff Structures, Values of Option at Expiration, Option Trading Strategies, The Put-Call Parity Relationship, Fundamentals of Option Valuation, Binomial Option Pricing Model, Black-Scholes Option Valuation Model, Forward and Future Contracts: Basic Concepts, Trading Mechanics, Hedging Strategies, Pricing and Valuation, Foreign Exchange Futures, Stock-Index Futures, Interest Rate Futures, Commodity Futures, Swaps, Warrants and Convertible Securities, Other Embedded Derivatives.

#### **Recommended Textbooks:**

- 1. Madura, J. Financial Markets & Institutions. (Cengage Learning).
- 2. Mishkin, F. S. and Eakins, S. G. Financial Markets and Institutions. (Pearson).
- 3. Reilly, F. K., Brown, K. C. and Leeds, S. J. *Investment Analysis & Portfolio Management*. (Cengage Learning).
- 4. Bodie, Z., Kane, A. and Marcus, A. Investments. (McGraw Hill).

#### 4103: IT Governance and Information System Audit

#### **Course Objectives:**

The objective of this course is to make students understand and apply the control mechanisms used by organizations in an IT environment and how to conduct audits of the information system. Students will learn practical aspects of the IT audit process, risk assessment and IT Governance, Frameworks, Standards, and Regulations. The students will also have the opportunity to conduct risk assessments, create audit programs, and test controls, and analyze test results for concluding audit reports. The course will also explore how to use CAATs - Computer Assisted Audit Techniques (e.g., ACL) for conducting audits.

#### **Intended Learning Outcomes (ILOs):**

Upon completion of this course, students will be able to:

- 1. Understand the IT environment and the fundamentals of IT audit and the various legal, ethical, and social issues and policies regarding the Information System.
- 2. Understand and apply the IT audit standards and guidelines developed by ISACA.
- 3. Understand the IT governance, management, and control frameworks and related standards, guidelines, and practices along with features of information systems, the impact of information systems, different strategic models, and challenges of information systems.
- 4. Identify the threats against and defenses needed for the performance and security of business information systems as well as the societal impact and ethical implications of information technology. Learn about the enterprise's security policies, standards, procedures, and controls to ensure the confidentiality, integrity, and availability of information assets.
- 5. Demonstrate the knowledge necessary to audit information systems in accordance with IS audit standards to assist the organization with protecting and controlling information systems.

6. Understand the traditional, prototyping, and end-user approaches to the development of information systems and discuss the processes and managerial issues in the implementation of new business applications of information technology.

## **Detailed Course Contents:**

#### 1. IT Audit Fundamentals: [ILO 1]

## 1.1 Information Technology Environment and IT Audit

IT environment; ERP; Cloud Computing; Blockchain; Fintech technologies; Artificial Intelligence Technologies; DSS; Definition of IT Audit, Objectives and Need for Audit; IT Audit Functions; Internal IT Audit; External IT audit; Role of IT Auditors; IT Auditor Profile - Experience and Skill, Career Opportunities.

#### **1.2 Internal and External IT Audit**

Building an Effective Internal IT Audit Function; Benefits of Internal IT Auditing: Internal IT Audit Challenges; External IT Audit Process.

#### 1.3 Legal, Ethical, and Social Issues in Information Systems

IT Crimes and Cyberattacks; Security Legislation; Privacy Legislation; Information Security; IT policies; Standards and Procedures; Relevant Laws, Regulations, and Industry Standards affecting the Organization; Impact of Ethical and Social Issues in Information Systems; National IT Policy 2009; Information and Communication Technology Act, 2006, SOX 2002.

#### 2. IS Auditing Standards and Guidelines: [ILO 1, ILO 2]

ISACA Code of Professional Ethics; ISACA IS Auditing Standards Framework; ISACA IS Auditing Guidelines; ISACA IS Auditing Procedures; Relationship among Standards; Guidelines and Procedures; Information Technology Assurance Framework (ITAF<sup>TM</sup>).

## 3. IT Governance and Strategy: [ILO 1, ILO 2, ILO 3]

IT Governance—Alignment of IT with Business Objectives; Governance Frameworks – COSO, ITIL, COBIT, ISO 27001, ISO/IEC 27002; Joint Framework; IT Performance Metrics; IT Balanced Scorecard; Regulatory Compliance and Internal Controls; IT Strategy; IT Steering Committee; Communication; Operational Planning.

## 4. Risk Management and Internal Controls: [ILO 1, ILO 4]

## 4.1 Risk Management

Risk Management Basics; Qualitative and Quantitative Risk Analysis; Enterprise Risk Management; Risk Assessment; IT Risk Assessment; Guidelines; IT Risk Management Life Cycle.

## 4.2 Application Systems: Risks and Controls

Application System Risks; End-User Development Application Risks; Risks to Systems Exchanging Electronic Business Information; Web Application Risks; Application Controls – Input-processing-output; IT Auditor's Involvement.

#### 4.3 Change Control Management

Importance of a Change Control System; Change Control Management Process; Change Control Management Procedures; Configuration Management; Organizational Change Management.

## 5. The Information System Audit Process, Tools, and Techniques: [ILO 1, ILO 5]

## 5.1 IT Audit Process

Audit Universe; COBIT; Risk Assessment; Audit Plan; Design Audit Procedure; Test Controls; Substantive Tests; Document Results; Communications; Auditing Entitylevel Controls; Auditing Operating Systems, Storage, and Applications; Auditing Cloud Computing and Outsourced Operations; Auditing Company Projects; Auditing Data Center and Disaster Recovery Plan; Communicating Audit Results, Other IT Audits.

## 5.2 Tools and Techniques used in IT Audit

Audit Productivity Tools; System Documentation Techniques; Flowcharting; CAAT - CAAT for Sampling, CAAT for Application Review, CAAT for Auditing Application Control, CAAT for Operational Review; Computer Forensic Tools.

## 6. System Development and Implementation: [ILO 1, ILO 6]

#### 6.1 System Development Lifecycle

System Development Life Cycle; Planning; System Analysis and Requirements; System Design; Development; Testing; Implementation; Additional Risks and Associated Controls Related to the SDLC Phases; Approaches to System Development; IT Auditor's Involvement in System Development, and Implementation.

#### 6.2 Systems Acquisition, Service Management, and Outsourcing

Systems Acquisition Strategy; Systems Acquisition Process; Service Management; Outsourcing IT System; IT Audit Involvement.

#### **Recommended Textbooks:**

- 1. Otero, A. R. Information Technology Control and Audit, (CRC Press, Taylor & Francis Group).
- 2. Davis, C., Schiller, M. and Wheeler, K. *IT Auditing Using Controls to Protect Information Assets*. New York, NY: (McGraw-Hill).
- 3. Gantz, S. D. *The Basics of IT Audit: Purposes, Processes, and Practical Information*, (Elsevier Inc.)

#### **Reference Materials:**

- 1. CISA Review Manual: Information Systems Audit and Control Association
- 2. ICAB Study Manual, IT Governance.
- 3. O'Brien, J. A., Marakas, G. M. and Behl, R. *Management Information Systems*, (Tata McGrawHill Education Private Limited).
- 4. Laudon, K. C. and Laudon, J. P. *Management Information Systems Managing the Digital Firm* (PHI Learning Private Limited), New Delhi.
- 5. National IT Policy, 2009.
- 6. Information and Communication Technology Act, 2006.
- 7. Hall, J. A. Accounting Information Systems, (South-Western CENGAGE Learning)
- 8. Romney, M. B. and Steinbart, P. J. Accounting Information Systems, (Pearson Education, Inc.)

#### 4104: Supply Chain and Operation Management

#### **Course Objectives:**

This is an introductory course on the concepts, principles, and techniques for managing supply chains and operations both in manufacturing and service organizations. The terminology, fundamental concepts, and functions related to the field of supply chain and operations management will be discussed.

## Intended Learning Outcomes (ILOs):

Upon completion of this course, students should be able to:

- 1. Understand the basic terminology, concepts, and principles of supply chain and operations management.
- 2. Develop an idea on operations and supply chain strategies.
- 3. Analyze process choices and take layout decisions in business processes.
- 4. Understand how to manage quality and capacity.
- 5. Learn about supply management and logistics.
- 6. Conduct forecasting and sales and operations planning.
- 7. Manage inventory and production in relation to the supply chain.
- 8. Understand supply chain information systems.
- 9. Understand JIT/Lean production.
- 10. To learn about the quantitative techniques.

#### **Detailed Course Contents:**

1. Operations and Supply Chain Management: [ILO 1]

Operations Management; Supply Chain Management; Important Trends such as Agility; Information Technologies; people.

2. Operations and Supply Chain Strategies: [ILO 2]

Elements of the Business; Strategy; Operations and Supply Chain Strategies; Customer Value; Performance Dimensions; Order Winners and Order Qualifiers; Stages of Alignment with the Business Strategy; Core Competencies in Operations and Supply Chain.

- **3.** Process Choice and Layout Decisions in Manufacturing and Services: [ILO 3] Manufacturing Processes; Product Customization within the Supply Chain; Service Processes; Layout decision models.
- Business Processes: [ILO 3] Business Processes; Mapping Business Process; Managing and Improving Business Processes; Business Process Challenges and the SCOR Model.
- 5. Managing Quality and Capacity: [ILO 4]

Quality defined – total cost of quality – Total Quality Management (TQM) – Six Sigma – statistical quality control – managing quality across the supply chain – capacity – measures of capacity – factors affecting capacity – supply chain considerations – capacity strategies – methods of evaluating capacity alternatives – process capacity (The Theory of Constraints, Waiting Line Theory and Little's Law).

6. Supply Management and Logistics: [ILO 5]

Why supply management is critical? – the strategic sourcing process – the procure to pay cycle – sustainable supply – supply chain disruptions – why logistics is critical? – logistics decision areas – logistics strategy – logistics decision models.

## 7. Forecasting: [ILO 6]

Forecast types – laws of forecasting – selecting a forecasting model – qualitative forecasting methods – time series forecasting models – causal forecasting models – measures of forecast accuracy – Collaborative Planning, Forecasting, and Replenishment (CPFR).

## 8. Sales and Operations Planning: [ILO 6]

Sales and Operations Planning (S&OP) in the planning cycle – major approaches to S&OP – organizing for and implementing S&OP – services considerations – linking S&OP throughout the supply chain – applying optimization modeling to S&OP.

## 9. Managing Inventory and Production: [ILO 7]

The role of inventory – inventory types – inventory drivers – independent versus dependent demand inventory - periodic review systems – restocking levels - continuous review systems – The Economic Order Quantity (EOQ) – reorder points and safety stock – quantity discounts – single-period inventory system – the Bullwhip effect – inventory positioning – transportation, packaging, and material handling considerations – master scheduling – Material Requirements Planning (MRP) – production activity control and vendor order management system – job sequencing – monitoring and tracking technologies – synchronizing planning and control across the supply chain – distribution requirements planning.

#### 10. Supply Chain Information Systems: [ILO 8]

Understanding supply chain information needs – supply chain information systems – BPM tools – cloud computing – Internet of Things (IoT)

## 11. JIT/Lean Production: [ILO 9]

The lean perspective on waste and inventory – recent developments in lean thinking – Kanban systems – controlling inventory levels using Kanban – synchronizing the supply chain using Kanban – using MRP and Kanban together.

#### 12. Quantitative Techniques in SCM: [ILO 10]

Linear Programming model formulation; Optimization using graphical method; Simplex method; Dual Simplex Method; Transportation Problem; PERT and CPM; Decision Tree Analysis.

#### **Recommended Textbooks:**

- 1. Bozarth, C. and Handfield, R. Introduction to Operations and Supply Chain Management. (Pearson).
- 2. Monczka, R. M., Monczka, R. B., Giunipero, L. C. and Patterson, J. L. *Purchasing and Supply Chain Management*. (South-Western Cengage Learning).
- 3. Crandall, R. E., Crandall, W. R. and Chen, C. C. *Principles of Supply Chain Management*. (CRC Press).

#### 4105: Public Sector Accounting and Financial Management

## **Course Objectives:**

The objective of this course is to provide students with a fundamental understanding of the government accounting system of Bangladesh as well as the public financial management. This course will help the students to develop the knowledge of the subject matters and students will be able to understand the legal sanction of the government accounting and its process including the government's financial management system.

## Intended Learning Outcomes (ILOs):

Upon completion of the course, the students will be able to:

- 1. Understand the constitutional and legal framework of government accounting practice in Bangladesh.
- 2. Know about the role of central bank in treasury and cash management.
- 3. Aware of the budget and accounting classification system of the government.
- 4. Understand the integrated financial management information system.
- 5. Know about the roles of the Controller General of Accounts in preparing the Financial Statements of Government.
- 6. Prepare the different elements of Financial Statements under government accounting system.
- 7. Know about the roles of the office of the Controller and Auditor General of Bangladesh.
- 8. Understand how to mobilize financial resources;
- 9. Know how to manage and execute government financial expenditure;
- 10. Define and understand the objective of public financial management and
- 11. Know about economic planning process by the Government of Bangladesh.
- 12. Know about the harmonization efforts of government accounting system through implementation of IPSASs.

#### **Detailed Course Contents:**

1. Constitutional and Legal Framework of Government Accounting Practice in Bangladesh: [ILO 1]

Historical evolution of public sector accounting in Bangladesh, Relationship Between Central and Local Government, Relevant Constitutional Provisions (Section 84(1 & 2)); General Financial Rules; Treasury Rules and Subsidiary Rules, Forms and Manners of government accounting – Account Code & other divisional account codes.

#### 2. Role of Central Bank in Treasury and Cash Management: [ILO 2]

Relationships among Bangladesh Bank, Sonali Bank, and Accounts Offices; Role of the Central Bank in Treasury Functions and Cash Management; Cash management, Forecasting and Reporting.

## 3. Budget and Accounting Classification System (BACS): [ILO 3]

Features of Chart of Accounts (COA); Introduction to BACS; Structure of the Classification Chart in BACS; 13-digit Classification Structure & its Limitation; New

Classification Structure; Benefits of New Classification; Levels of Classification and their significance; Application of BACS; Volume-1,2,3 & 4 of Account Code.

4. Integrated Financial Management Information System (IFMIS): [ILO 4] Information to IFMIS; Features of a standard IFMIS; iBAS++ as an IFMIS (Budget Preparation Module, Budget Execution Module, Accounting Module, General Ledger), Integration of data/information using iBAS++ from Accounts Offices, Integration among the Bangladesh Bank, Sonali Bank, Economic Relations Division (ERD), NBR, National Savings Directorate; Flow of Accounting Data among the Government Offices.

#### 5. Controller General of Accounts: [ILO 5]

Objectives and Activities of CGA Office; Organogram of CGA Office; Introduction to Finance Accounts and Appropriation Accounts.

#### 6. Preparation of Annual Accounts: [ILO 6]

Basis of Accounting; Preparation of Consolidated Fund; Classification of Consolidated Fund; Public Account of the Republic; Classification of Public Account of the Republic; Forms and Manner of keeping Public Accounts; Appropriation Accounts; Appropriation Accounts by Civil Department; Defense Services, Bangladesh Post Office and Bangladesh Railway; New Appropriation Account Format from the 2017-18; Preparation of Finance Account.

#### 7. Implementation of IPSAS in Bangladesh: [ILO 12]

International Public Sector Accounting Standards Board (IPSASB); Brief History of IPSASB; IPSASB Activities; Introduction to IPSASs; Benefits and criticisms; Need for Harmonization around the World; Introduction to Cash Basis IPSAS; Introduction to Accrual Basis IPASAs; Implementation Status of IPSAS in Bangladesh; Major Challenges of IPSASs in Bangladesh.

#### 8. Supreme Audit Institution (SAI) of Bangladesh: [ILO 7]

Institutional Models of Supreme Audit Institutions; Comptroller and Auditor General (C&AG) of Bangladesh; Authorities and Responsibilities of C&AG; Audits of SAI; International Public Sector Accounting Standards (IPSAS); International Organization of Supreme Audit Institutions (INTOSAI); International Standards of Supreme Audit Institutions (ISSAIS); Asian Association of Supreme Audit Institutions (ASOSAI); Public Expenditure and Financial Accountability (PEFA); Public Access to the Information of PFM.

## 9. Mobilization of Financial Resources: [ILO 8]

Budget and its Dimensions; Budget Classification: Why It Is Important; Medium Term Budget Framework; MTBF Approach; Regulatory Framework of Budget; Public Moneys and Budget Management Act, 2009; External Aid, Loans; Foreign Aid and Budget Accounts (FABA).

#### 10. Management and Execution of Public Expenditure: [ILO 9]

Legal Framework of Public Procurement- Salient features of the PPA 2006 and the PPR 2008; Budgeting and Accounting Classification System (BACS); Integrated Budgetary and Accounting System (iBAS++); Supplementary Rules (SR); Management of Public Procurement- Key risks in public procurement and mitigation; Procurement Management under Public Private Partnership (PPP); Public Procurement Reform

Project II (PPRP-II); Digitizing Implementation Monitoring and Public Procurement Project (DIMAPPP).

## 11. Definition and Objectives of Public Financial Management (PFM): [ILO 10]

Attributes of a good financial management system; Key processes of Public Financial Management System (Macroeconomic forecasting, Budget preparation, Budget Execution, Accounting and Fiscal reporting, Cash Management, Debt management, Revenue Administration, Auditing); Broad understanding of the key processes; Issues associated with PFM; Constitutional Mandate and Laws on PFM; Types of Government Entities; Responsible Authorities Engaged in PFM; Responsibilities of the Authorities Engaged in PFM: Committees of Parliament Members on PFM; The PFM Reform Strategy 2016-2021.

## 12. Economic Planning in Bangladesh: [ILO 11]

History of Development Planning in Bangladesh; Perspective Plan of Bangladesh (2010-2021): Making Vision 2021 a Reality; Priorities of Vision 2021; Seventh Five Year Plan Targets; SDG and Seventh Plan; Annual Development Program; Vision 2041.

## **Recommended Textbooks and Reference Materials:**

- 1. Handbooks of International Public Sector pronouncements International Federation of Accountants, International Federation of Accountants.
- 2. Bangladesh Government, Ministry of Finance: Introduction to Government Accounting.
- 3. GoB., *Public Financial Management (PFM) Reform Strategy 2016-2021*. Ministry of Finance: Government of the People's Republic of Bangladesh.
- 4. Cangiano, M., Curristine, T. and Lazare, M., *Public Financial Management and Its Emerging Architecture*. Washington: International Monetary Fund.
- 5. ADB., Public Financial Management Systems—Bangladesh Key elements from financial Management Perspective. Asian Development Bank.

## FOURTH YEAR SECOND SEMESTER

#### 4201: Accounting Theory

#### **Course Objectives:**

The objective of this course is to provide students with the opportunity to obtain a sound knowledge of alternative theories of accounting. The course begins by examining the nature of theories and alternative forms of logic. The conceptual framework and key contemporary and historical accounting issues are examined, highlighting the role of theory in understanding current accounting standards, accounting practice and the use of accounting information by the diverse stakeholders in reporting entities. Moreover, the issues of corporate narratives are discussed in this course. Finally, a critical approach to understand social structures and the role accounting information played there are also covered in this course.

## Intended Learning Outcomes (ILOs):

**BBA Program**, Department of Accounting & Information Systems, University of Dhaka

After successful completion of this course, students will:

- 1. Understand the concept of accounting theory and the alternative approaches of theory development;
- 2. Understand how knowledge of different accounting theories increases our ability to understand and evaluate various alternative financial accounting practices;
- 3. Understand the meaning of regulation together with the arguments for and against accounting regulations;
- 4. Be aware of the theories of accounting regulations;
- 5. Realize the differences of nations' accounting practices prior to the standardization efforts of International Accounting Standards Board (IASB);
- 6. Be able to differentiate between the harmonization and standardization and be aware of the benefits and challenges of uniform accounting standards;
- 7. Conceive the importance of globalization in accounting practices and the role of IASB therein;
- 8. Be aware of the alternative measurement bases and there advantages and disadvantages;
- 9. Understand fair value accounting and the challenges of implementing fair value accounting;
- 10. Realize the importance of conceptual framework of accounting in the practice of financial accounting;
- 11. Recognize the key assumptions of Positive Accounting Theory (PAT) and understand alternative hypotheses of PAT;
- 12. Understand creative accounting and identify the determinant factors of creative accounting;
- 13. Understand sustainability accounting and recognize the underlying reasons of corporate narratives on sustainability issues;
- 14. Identify the market efficiency and explain capital markets' reactions to accounting disclosures;
- 15. Understand governance related notable theories and their application in ensuring accountability.
- 16. Understand human behavioral related theories in decision making and their application in organizations and society.
- 17. Understand the nature of critical accounting and recognize alternative social theories used in critical accounting research.

## 1. Introduction to Accounting Theory: [ILO 1, ILO 2]

Definition of Theory; Importance for Accounting Students to Study Accounting Theory; An Overview of Theories of Accounting: Pragmatic Theories, Normative Theories, Positive Theories; Theory Development Process; Alternative Theoretical Paradigms- Positivism, Interpretivism, Critical.

#### 2. Accounting Regulation: [ILO 3, ILO 4]

Definition of Accounting Regulation; Regulatory Environment in Accounting; Arguments Against Accounting Regulation- Free Market Perspective: Private Agency, Market for Manager, Market for Corporate Takeover, Market for Lemon; Arguments for Accounting Regulation; Theories of Regulation: Public Interest Theory, Regulatory Captures Theory, Private Interest Theory; How Theories of Regulation Apply to Accounting Practice; Accounting Regulation as an Output of a Political Process.

## 3. International Accounting: [ILO 5, ILO 6, ILO 7]

Differences in Accounting across the Nations; Harmonization and Standardization of Accounting; Pros and Cons of Accounting Standardization; Globalization and the Role of IASB in Accounting Standardization; The Obstacles of Accounting Standardization.

## 4. Measurement Issues: Accounting for the Effects of Changing Prices and Market Conditions: [ILO 8, ILO 9]

The Meaning of Measurement; Pros and Cons of Commonly Used Measurement Bases; Factors to Consider When Choosing Between Alternative Measurement Bases; Explanation and Evaluation of Various Normative Theories for Accounting for Changing Prices; Fair Value Accounting- the advantages and disadvantages of this form of measurement with a consideration of the procyclicality aspects of Fair Value Accounting.

## 5. Normative Theories of Accounting: The Case of Conceptual Framework Project: [ILO 10]

The meaning of, and the benefits and criticisms of, conceptual frameworks of accounting; Discussion of the pros and cons of the current IASB Conceptual Framework versus prior frameworks; The meaning of 'accountability' and its relevance and relationship to conceptual frameworks of accounting; The 'decision-usefulness' and 'stewardship' functions of financial reporting and the influences of these functions on current efforts to select among competing measurement approaches.

## 6. Positive Accounting Theory: [ILO 11, ILO 12]

Positive Accounting Theory defined: origins and development; An overview of agency theory and its relevance to Positive Accounting Theory; Efficiency or opportunistic perspectives relating to accounting method selection; The use of accounting-based bonus schemes to motivate managers (Bonus Plan Hypothesis); The role of accounting-based contracts in controlling conflicts of interest between managers and creditors (Debt Covenant Hypothesis); An overview of the meaning of political costs and the implications for accounting choice (Political Cost Hypothesis); Criticisms of Positive Accounting Theory; Relevance of Positive Accounting Theory to current efforts of the IASB and FASB to determine 'best' approaches to measurement.

Transaction Cost Theory; Market and Hierarchy Theory of Oliver Williamson; Keneth Arrow's General Impossibility Theorem, Agency Conflict Type I, Agency Conflict Type II, Ostrom's Common Pool Resource Governance theory, Coase Theorem: Private Negotiation and Governance Outside Court System.

## 7. Sustainable Accounting/Corporate Narratives and System Oriented Theories: [ILO 13]

Defining Sustainable Accounting; Issues of Sustainable Accounting; Regulatory Efforts in Sustainability Accounting; System Theories to Understand Sustainable Accounting; Social Contract and The Corporate Disclosures on Sustainability; Legitimacy Theory: legitimacy, legitimacy gap and the legitimation process; Impression Management Approaches and Its Relation with Corporate Legitimacy and Corporate Disclosures; Stakeholder Theory: Managerial vs Normative Branch; Media Agenda Setting Theory- Relationship between Media, Corporate Legitimacy and Corporate Disclosures; Institutional Theory: Old Institutional Economics and New Institutional Sociology- Isomorphism and Decoupling; Integrated Reporting & ESG Reporting.

## 8. Accounting and Capital Markets: [ILO 14]

Fama's Efficient Market Hypothesis and Tests of Market Efficiency with respect to Accounting Information; Effects of Earnings Announcements on the Level and Variability of Stock Prices; Association between Accounting Performance Measures and Stock Returns; The implication for capital markets research when we relax key assumptions about market efficiency. Criticism of Efficient Market Hypothesis of Robert Schiller (Irrational Exuberance)

#### 9. Accounting and Behavioral Theories: [ILO 16]

Full Rationality Assumption, Criticism of Full Rationality Assumption, Bounded Rationality, Criticism of Expected Utility Theory, Kahneman and Tversky's Decision Making Under Risk, Prospect Theory, Assumptions of Prospect Theory – Utility Derived from Reference Point, Loss Aversion, Diminishing Sensitivity to Gains and Losses, and Probability Weighting; Thaler's Mental Accounting Theory.

## 10. Critical Perspectives of Accounting: [ILO 17]

Defining Critical Accounting; The Possible Impact of Critical Accounting Research on Social Practice; Role of State and Society in Accounting Practice; Social Theories Used in Critical Accounting- Ideas of Marx, Foucault, Bourdieu, Gramsci, Latour etc.

#### **Recommended Textbooks:**

- 1. Deegan, C. Financial Accounting Theory (McGraw-Hill).
- 2. Scott, W. R. Financial Accounting Theory (Pearson).

#### **Reference Materials:**

1. Chowdhury, D. *Applied Accounting Theory: Private and Public Sector* (Grantha Kutir), Dhaka.

#### 4202: Business Analysis and Valuation

#### **Course Objectives:**

The objective of the course is to provide hands-on experience in business analysis using financial and non-financial information. This course is aimed at all students who expect at some point in their careers to use financial statements to evaluate the performance, prospects, and value of a business. This course will be particularly valuable to students who are seeking a career in consulting, corporate finance, investment banking, hedge funds, or private equity.

#### Intended Learning Outcomes (ILOs):

Upon Successful completion of this course, students will be able to:

- 1. Gain a complete knowledge to develop their ability to basic concepts of financial statement analysis for investment and credit decisions and solving the business problems by analysis and interpretation of accounting information, supplied mainly through financial statements.
- 2. Get a clear idea about a set of accounting information items which constitutes a logical framework that can be applied to predict both earnings level and growth in earnings, and together with other accounting fundamentals, can used to predict fundamental value of shares.
- 3. Understand the role of accounting rate of return (ARR) in the security valuation process.
- 4. Demonstrate the underlying interdependency between cash accounting and accrual accounting in judging the quality of accrual earnings and the culture of earnings management by firms.
- 5. Build a career in consulting, corporate finance, investment banking, hedge funds, or private equity.
- 6. Explore the role of leverages—both financial leverage and operating leverage—on profitability and its relation to macroeconomic and monetary policies.

#### **Detailed Course Contents:**

#### 1. Introduction to Financial Statements: [ILO 1, ILO 2]

Financial Statements and their Users; Objectives of Financial Statement Analysis; From Business Activities to Financial Statements; Parts of The Financial Statements; Additional Information Accompanying Financial Statements; Measurement in the Financial Statements; Influences of the Accounting System on Information Quality; Financial Statement Analysis in an Efficient Capital Market; Limitations of Financial Accounting Data for Financial Statement Analysis.

#### 2. Financial Statement Analysis: [ILO 1, ILO 2]

- **2.1 Horizontal and Vertical Analyses:** Comparative Financial Statement Analysis: Year-To-Year Change Analysis, Index Number Trend Analysis, Common-Size Financial Statement Analysis.
- **2.2 Ratio Analysis:** Common Sets of Financial Measures and Ratios: Liquidity Measures and Ratios, Profitability Measures and Ratios, Activity Measures and Ratios, Solvency Measures and Ratios, Overall Measures and Ratios: Earnings Per Share,

Price to Earnings Ratio, Price to Book Ratio, Dividend-Payout Ratio, Sustainable Growth Rate.

- **2.3 Profitability Analysis:** The Analysis of Return on Common Equity, First-Level Breakdown: Distinguishing Financial and Operating Activities and the Effect of Leverage, Second-Level Breakdown: Drivers of Operating Profitability, Third-Level Breakdown: Profit Margin Drivers, Turnover Drivers, Borrowing Cost Drivers.
- 2.4 Case Analysis on 'Financial Statement Analysis'

#### 3. Use of Financial Statements in Valuation: [ILO 1, ILO 3]

- 3.1 Multiple Analysis: Method of Comparable and Screening of Multiples
- **3.2** Fundamental Analysis: The Process of Fundamental Analysis, Financial Statement Analysis, and Pro-Forma Analysis.
- **3.3** Redefining Financial Statements for Valuation: Defining Net Operating Assets, Net Financial Obligations and Common Stock Equity; Operating Income and Net Financial Expenses; Return on Common Equity and its Decomposition between Profitability of Net Operating Assets and Net Borrowing Costs.
- **3.4** The Architecture of Fundamental Analysis: The Valuation Model, the Terminal Value Calculation, Capital Asset Pricing Model (CAPM) and the Choice of Discount Rate.
- **3.5** Case Analysis on 'Financial Statements Used in Valuation'.

#### 4. Cash Accounting, Accrual Accounting and Equity Valuation: [ILO 4]

- **4.1** Cash Flows, Earnings and Accrual Accounting; Reconciling Earnings with Free Cash Flows; Operating Accruals and Financial Accruals; and Accruals and Earnings Management.
- **4.2** Valuation Models: Modigliani-Miller (MM) Approach to Valuation and the Role of Leverage; Dividend Discount Model, Earnings Capitalization Model, Residual Earnings Model; and Free Cash Flow Model.
- **4.3** Accrual Accounting and Price-to-Book Ratio; Relation between Price-to-Book (P/B) Ratio and Price-Earnings (P/E) Multiple.
- **4.4** Residual Earnings Model of Equity Valuation: Concept of Residual Earnings, Features of Residual Earnings Model; Discounting Residual Earnings, Drivers of Residual Earnings; Using Hierarchical Financial Ratios to Forecast Drivers of Residual Earnings; and Drivers of Growth in Residual Earnings.

4.5 Case Analysis on 'Cash Accounting, Accrual Accounting and Equity Valuation'

#### 5. The Analysis of Growth and Sustainable Earnings: [ILO 1, ILO 2]

Equity Valuation and Growth in Earnings; Concept of Sustainable Earnings; Core Operating Profitability; Core Borrowing Costs; Growth in Core Profitability; and how P/B Ratios and Trailing P/E Ratios Articulate; Case Analysis on 'Growth and sustainable earnings.

#### 6. The Analysis of Credit Risk, Return and Valuation: [ILO 1, ILO 2]

Financial Statement Analysis for Credit Evaluation, Financing Risk; Distinguishing Between Financial Leverage and Operating Leverage; Relation between Return and Leverages; Leverages and Taxes; Monetary Policies, Interest Rates, Leverages and its Effects on Residual Earnings; Leverages and Residual Earnings Model; Liquidity Planning and Financial Strategy; Bankruptcy Model; Case Analysis on 'Credit Risk, Return and Valuation'.

7. Corporate Restructuring: [ILO 6]

Mergers and Acquisitions and Corporate Restructuring; Key Players in Mergers and Acquisitions, Merger and Acquisition Strategy Development, Developing Takeover Strategies and the Impact on Corporate Governance; Selecting a Potential Target Company for Acquisition, Mergers and Acquisitions and Financial Analysis, Alternative Approaches to Valuation; Negotiations, Deal Structuring, Financing, and Regulatory Considerations.

## 8. Comprehensive Case Analysis: [ILO 5]

Business Valuation; Business Forecasting, Economic Analysis of Business, Industry Analysis, Market forecast, Impact of Information Technology, Impact of Share market on Business.

## **Recommended Textbooks:**

- 1. Penman, S. H. Financial Statement Analysis and Security Valuation (McGraw-Hill Irwin).
- 2. Bernstein, L. A. and Wild, J.J. *Financial Statement Analysis: Theory, Application, and Interpretation* (McGraw-Hill Irwin).

## **Reference Materials:**

- 1. Stanko, B. and Zeller, T. *Understanding Annual Reports: A User's Guide* (John Wiley & Sons, Inc.).
- 2. Palepu, K. G. and Healy, P.M. *Business Analysis & Valuation Using Financial Statements* (South-Western Cengage Learning).

## 4203: Data Analytics

## **Course Objectives:**

This course aims to train students to extract patterns in vast amounts of data and discover actionable insights. It emphasizes on the current issues, methodologies, practice, and emerging trends in business data analytics. Students will learn state-of-art techniques and critical skills to address existing business problems in today's information-rich environments. Upon completing this course, students will build their analytical capabilities to use data for innovative business solutions.

## Intended Learning Outcomes (ILO):

Upon successful completion of this course students are expected to:

- 1. Recognize the need for Data Analytics to support business management.
- 2. Apply the concepts and techniques of business data analytics in business practice.
- 3. Apply information technologies for data analytics.
- 4. Identify appropriate tools and techniques for data analytics in order to create innovative business intelligence solutions.
- 5. Create an analytical data store by extracting relevant data from a transactional database.

## **Detailed Course Contents:**

## PART A: Theory (50%)

## 1. Analytics Overview: [ILO 1]

Descriptive analytics, Predictive Analytics and Prescriptive analysis.

## 2. Data Mining concepts [ILO 1, ILO 2]

Data Mining definitions, Characteristics and Benefits, How Data Mining works, Data Mining versus Statistics, Data Mining Applications, Data Mining Process Model (CRISP-DM).

## 3. Data Mining Methods [ILO 2, ILO 4]

Classification, Accuracy of Classifying Model, Classification Techniques, Decision Tree analysis, Decision Tree algorithm, Cluster analysis, K-MEANS Clustering algorithm, Association rule analysis, Apriori algorithm.

## 4. Regression Modelling for Inferential Statistics [ILO 2]

Linear Regression Model, Multiple Regression Model, Logistic Regression Model, Time Series Analysis.

 Social Media Analytics [ILO 3] Social Network analysis, Social Network analysis metrices, Social Media analytics, Measuring the Social Media Impact.

#### 6. Text Analytics and Text Mining [ILO 3] Overview of Text Analytics and Text Mining, Text Mining Terminology, Natural

Language Processing (NLP), NLP Applications, Text Mining Applications.

## PART B: Practical (50%)

 Labs are very hands on in nature, where students will be expected to work with various examples and data sets based on instructions and class discussion. Association rule analysis in Python Programming. Decision Tree analysis in Python Programming. Cluster analysis in Python Programming.

Descriptive Statistics in Python Programming. [ILO 4, ILO 5]

8. Business applications like fraud detection, credit scoring, and loan application, marketbasket analysis etc. will be shown. **[ILO 4, ILO 5]** 

Criteria	Allocated	
	Marks	
Mid Term / In-course Examination-1	15	Continuous
(Theory)		Assessment (40%)
Mid Term / In-course Examination-2	15	
(Practical in Lab)		
Quizzes/Term Paper/Assignments/Class	10	
Attendance		
Semester Final (Theory)	30	Final Assessment
Semester Final (Practical in Lab)	30	(60%)
Total	100	

## Marks Distribution for this Course:

#### **Recommended Textbooks:**

- 1. Sharda, R., Delen, D. and Turban, E. *Business Intelligence, Analytics, and Data Science: A Managerial Perspective*, (Pearson).
- 2. Olson, D. and Shi, Y. Introduction to Business Data Mining, (McGraw-Hill).

## **Reference Materials:**

- 1. Evans, J. R. Business Analytics. (Pearson).
- 2. Berry, M. J. A. and Linoff, G. S. *Data Mining Techniques: For Marketing, Sales, and Customer Relationship Management.* (John Willey & Sons)
- 3. Shmueli, G., Patel, N. R. and Bruce, P. C. *Data Mining for Business Intelligence: Concepts, Techniques, and Applications in Microsoft Office Excel with XLMiner.* (John Willey & Sons).
- 4. Provost, F. and Fawcett, T. *Data Science for Business: What You Need to Know about Data Mining and Data-analytic Thinking.* (O'Reilly Media, Inc.)
- 5. Davenport, T. H., Harris, J. G. and Morison, R. *Analytics at Work: Smarter Decisions, Better Results.* (Harvard Business Press).

#### 4204: Strategic Management

#### **Course Objectives:**

This course is designed to provide an overview of the principal aspects of strategic management. The objective is to offer students strategy insights so that they can become strategic thinkers. Students will be able to contemplate strategic dilemmas and apply strategic planning, implementation, and evaluation tools.

#### Intended Learning Outcomes (ILOs):

Upon completion of this course, students should be able to:

- 1. Understand the basic terms and concepts of strategic management.
- 2. Develop vision and mission statements for different types of organizations.
- 3. Conduct an industry analysis and identify the opportunities and threats.
- 4. Conduct competitive analysis.
- 5. Conduct internal analysis and identify the strengths and weaknesses.
- 6. Formulate alternative strategies and choose the desired ones for implementation.
- 7. Understand how to develop new products/services in a blue ocean.
- 8. Implement and evaluate strategies.
- 9. Prepare and present a strategic case analysis.

#### **Detailed Course Contents:**

#### 1. Introduction to Strategy and Strategic Management: [ILO 1]

Strategic management – stages of strategic management – Ohmae's strategic thinking - competitive advantage – strategists – vision and mission – external opportunities and threats – internal strengths and weaknesses – long-term objectives – strategies – deliberate and emergent strategies [Mintzberg] – Mintzberg's five types of strategies positioning vs. resource-based views of strategic advantage - annual objectives –
 policies – strategic management model – benefits of strategic management –
 guidelines for effective strategic management – business ethics and strategic management – the role of stakeholders – stakeholder mapping: power and interest global competition.

#### 2. The Business Vision and Mission: [ILO 2]

Vision- mission – the importance of vision and mission statements – elements of a mission - the process of developing a mission statement –characteristics of a mission statement – components of a mission statement – writing and evaluating mission statements.

#### 3. External Analysis: [ILO 3, ILO 4]

The business environment – the importance of management understanding the business environment – political forces – economic forces – social, cultural, and demographic forces – technological forces – ecological factors – legal forces – competitive forces – Porter's five forces model – industry life cycles and their strategic implications – industry segments and strategic groups – product life cycle - the international business context – Ohmae's five Cs – Porter's competitive advantage of nations – international trade life cycle - limits to global business – External Factor Evaluation matrix – the Competitive Profile Matrix.

#### 4. Internal Analysis: [ILO 5]

Analyzing a business' strategic capability – critical success factors and core competencies – critical success factors and competitive advantage – The internal assessment: management, marketing, finance/accounting, production/operations, research and development, management information systems – benchmarking competencies – transforming resources: the value chain – outsourcing value activities – supply chain management – Internal Factor Evaluation matrix.

#### 5. Types of Strategies [ILO 6]

Integration strategies – intensive strategies – diversification strategies – defensive strategies – Porter's generic strategies: cost leadership, differentiation, and focus – Bowman's strategic clock - means of achieving strategies: joint venture/partnering and merger/acquisition.

#### 6. Strategic Analysis and Choice [ILO 6]

The strategy formulation framework (the input stage, the matching stage, and the decision stage) – the matching stage: SWOT matrix, SPACE matrix, BCG matrix, IE matrix, and GSM – the decision stage (QSPM) – the cultural aspects of strategy choice – the politics of strategy choice.

#### 7. Blue Ocean Strategy: [ILO 7]

New market space – the continuing creation of blue oceans – the impact of creating blue oceans – the rising imperative of creating blue ocean – value innovation – red ocean vs. blue ocean strategy – formulating and executing blue ocean strategy – the eight principles of blue ocean strategy.

#### 8. Strategy Implementation and Evaluation [ILO 8]

The nature of strategy implementation – resource allocation – managing conflicts – restructuring and reengineering – linking performance and pay to strategies – managing natural environment – creating a strategy supportive culture –

production/operations concerns and HRM concerns – marketing issues – finance/accounting issues – research and development issues – management information systems issues – the strategy evaluation framework – the balanced scorecard – characteristics of an effective evaluation system – contingency planning.

#### 9. Case Analysis: [ILO 9]

Strategic management case – guidelines for preparing case analysis – written case analysis and oral presentation.

## **Recommended Textbooks:**

- 1. David, F. R. Strategic Management: Concepts and Cases. (Prentice-Hall).
- 2. Kim, W. C. and Mauborgne, R. *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant.* (Harvard Business Review Press).
- 3. Business Strategy Study Manual, CA Professional Level. ICAB & ICAEW.

#### 4205: Research Methodology

#### **Course Objectives:**

This course is designed to build the foundation of scientific thinking and to understand the framework of the research process. It helps the students to understand the research design, process and techniques to conduct qualitative and quantitative business research and also develop their own ideas and project. After completion of this course, the students will be enriched with all relevant knowledge of research methodology in qualitative and quantitative area of business research. This course will guide the students in writing their research reports in their academic and career advancement.

## Intended Learning Outcomes (ILOs):

Upon successful completion of this course students are expected to:

- 1. Build the foundation of scientific thinking and understand the framework of the research and its process;
- 2. Develop an understanding of research design and techniques;
- 3. Differentiate between symptoms and problems and development of problem statement;
- 4. Learn the importance of doing Literature Review;
- 5. Understanding the importance of theory in research and development of hypothesis;
- 6. Get into the detail process of qualitative and quantitative research;
- 7. Understanding the sampling methods and determination of sample size;
- 8. Learn about data collection techniques under Qualitative Research;
- 9. Know the measurement and scaling techniques of Attributes;
- 10. Understanding the Secondary Data Analysis Techniques;
- 11. Learn about the Qualitative and Quantitative Data Analysis Techniques and the details of hypothesis testing;
- 12. Equip the students for scholarly writing and evaluate the report.

## **Detailed Course Contents:**

## 1. Introduction to Research: [ILO 1]

Definition of Research; The Nature of Research; Importance of Research; Main Distinguishing Characteristics of Research; Types of Research; Research Method and Research Methodology; Approaches of Research; Business Research in the 21<sup>st</sup> Century.

#### 2. Overview of Research Process: [ILO 2]

The Steps of Scientific Business Research Methods; Symptoms and Problems Identification; Defining the Research Objectives; Planning the Research Design; Planning Sampling; Data Types and Collection Procedures; Analysing the Data; Drawing Conclusion; Preparing the Report; Pilot Studies; Ethical Issues in Research; General Rights and Obligations of the Concerned Parties.

## 3. Problem Definition-The Foundation of Research: [ILO 3]

Identification of Symptoms and Problems; Understanding the Problem-Definition Process; Development of Problem Statement; Determining the Unit of Analysis; Determine the Relevant Variables; Clarity in Research Questions and Hypotheses; Preparation of Research Proposal.

#### 4. Critically Reviewing the Literature: [ILO 4]

Meaning of Literature Review; Functions of Literature Review; Steps for Literature Review; Sources of Literature; Concept of Plagiarism; Importance of Referencing; Different styles of Referencing.

## 5. Theoretical Framework and Hypothesis Development: [ILO 5]

Definition of Theory; Goals of Theory; Research Concepts, Constructs, Propositions and Variables; Understanding Theory through Theory Building and Theory Verifying; Values of Theories; Importance of Development of Theoretical Framework in Research; Types of Variables and Labels of variables; Types of Hypotheses; Development of Hypotheses.

#### 6. Qualitative and Quantitative Research: [ILO 6]

Definition of Qualitative and Quantitative Research; Differences between Qualitative and Quantitative Research; Types of Qualitative Research; The Major Categories of Qualitative Research; Common Techniques Used in Qualitative Research.

## 7. Sampling Designs and Sampling Procedures: [ILO 7]

Meaning of Sampling; Population Vs Sampling; Importance of Sampling in Research; Introduction to Sampling Process; Probability Sampling Techniques; Non-Probability Sampling Techniques; Sampling Errors; Factors for Choosing Appropriate Sampling Techniques; Determination of Sampling size; Factors Contributing the Determination of Sampling Size.

## 8. Primary Data Collection Methods: [ILO 8]

#### a) Observation Method

Concept of Observations; Usefulness of Observation in Research; Scopes of Observation in Research; Key Dimensions that Characterize the Type of Observations; The Nature of Observation Studies; Benefits and Limitations of Observations; Ethical issues in Observation; Techniques for Measuring the Physiological Reactions.

#### b) Interview Method

Concept of Interview; Importance of Interview; Advantages and Disadvantages of Interview; Types of Interviews; Meaning of Focus Group Discussion; Advantages and Disadvantages of FGD; Qualities of Moderators of FGDs; Basic Consideration for Questionnaire Design; Guidelines for Constructing Questionnaires; Types of Questionnaires; Question Sequence Techniques; Layout of Questionnaires; Use of Software in Designing Questionnaires; Pretesting of Questionnaires;.

## c) Survey Method

Introduction to Survey Research, Advantages and Disadvantages of Survey; Methods of Survey Research; Paper Questionnaires and Electronic Questionnaires; Types of Paper Questionnaires; Types of Electronic Questionnaires; Errors in Survey Research; Response Rates of Survey and Methods of Increasing Response Rate; Factors Guiding the Appropriate Survey Design; Pretesting.

#### 9. Measurement and Scaling Concept: [ILO 9]

Importance of Measurement of Properties of Phenomena; Introduction to Concepts, Scales, Variables and Constructs terminology; Level of scale measurement; Mathematical and statistical analysis of Scales; Index Measures; Importance of Measuring Attitudes; Techniques for Measuring Attitudes; Ranking Vs Rating; Criteria for Good Measurement.

#### 10. Secondary Data: [ILO 10]

Meaning of Secondary Data; Sources of Secondary Data; Advantages and Disadvantages of Secondary Data; Data Mining, Techniques of Analysing Secondary Data.

#### 11. Analysing Qualitative Data: [ILO 11]

Preparing Data for Analysis; Approaches to Qualitative Analysis; Types of Qualitative Analysis Processes; Analytical Aids; Deductively Based Analytical Procedures; Inductively Based Analytical Procedures; Using CAQDAS for Qualitative Analysis; Content Analysis.

## 12. Analysing Quantitative Data: [ILO 11]

Overview of Data Analysis; Different stages of Data Analysis; Descriptive Analysis of Data; Univariate Analysis of Data; Bivariate Analysis of Data; Multivariate Analysis of Data; Hypothesis testing Procedures; Parametric Vs Non-Parametric Tests; Correlation and Regression Analysis; Post Regression Diagnostic analysis; Testing the Goodness of Measures.

## 12. Preparation of Research Report: [ILO 12]

Purposes of Report Preparation; Characteristics of a well-written Report; Contents of Report; Effective use of Graphic Aids in Report; Referencing.

#### **Recommended Textbooks:**

- 1. Zikmund, W. G. Business Research Methods (Thomson/South-Western).
- 2. Sekaran, U. and Bougie, R. *Methods for Business: A Skill Building Approach* (John Wiley & Sons).
- 3. Sanders, M., Lewis, P. and Thornhill, A. *Research Methods for Business Students* (Pearson).
- 4. Kothari, C. R. *Research Methodology: Methods and Techniques* (New Age Publications).
- 5. Gosh, B. N. Scientific Method and Social Research (APT Books).
- 6. Ranjit, K. Research Methodology (SAGE)

## **References Materials:**

- 1. Kerlinger, F. N. and Lee, H. B. *Foundations of Behavioral Research* (Cengage Learning).
- 2. Emory, C. W. and Cooper, D. R. Business Research Methods (IRWIN).
- 3. Malhotra, N. K. Marketing Research (Prentice Hall).

## Syllabus Committee

0	Professor Mohammad Tareq, PhD	Convener
0	Professor Dewan Mahboob Hossain, PhD	Member
0	Professor Amirus Salat	Member
0	Professor Md. Musfiqur Rahman, PhD, FCMA	Member
0	Md. Saiful Alam, PhD, FCMA	Member
0	Mohammad Moniruzzaman, PhD, FCA, ACMA	Member
0	Md. Jamil Sharif, <i>PhD</i> , FCMA	Member
0	Minhaj Ferdous, PhD	Member
0	Mr. Md. Mazharul Anwar	Member
0	Mr. Ahmed Rizvan Hasan	Member