**NORTH SOUTH UNIVERSITY**

**Center of Excellence in higher Education**

**The first private university in Bangladesh**

**School of Business**

**Department of Management**

|  |  |
| --- | --- |
| **Course Name:** | Introduction to Statistics |
| **Course Code**  **& Section No:** | BUS 172, Section- 39 |
| **Semester:** | Fall 2016 |

|  |  |
| --- | --- |
| Instructor & Department Information | |
| 1. **Instructor Name:** | **Sheikh Mohammad Rabby (Rby)** | |
| 1. **Office** | NAC 975 | |
| 1. **Office Hours:** | Mondays & Wednesdays (MW): 11.20 AM – 01.00 PM  02.30 PM – 04.20 PM  Thursdays (R): 11.00 PM – 12.30 PM  Saturday (A): 09.30 AM – 11.00 | |
| 1. **Office Phone:** |  | |
| 1. **Email Address:** | sheikh.rabby2@gmail.com ; sheikh.rabby@northsouth.edu | |
| 1. **Department:** | Department of Management | |
| 1. **Links:** | rbynsu.weebly.com  North South University Website: http://www.northsouth.edu  School of Business Website: http://www.northsouth.edu/academic/sob/ | |

|  |  |
| --- | --- |
| Course & Section Information | |
| **Class Time & Location** | A 11:10 AM - 02:00 PM, NAC 505 | |
| **Course Prerequisite(s)** | Freshman | |
| **Course Credit Hours** | 3:0 | |
| **Course Description** | Introduces modern theory and methodology of statistics and their application in economics and business. Topics include descriptive statistics, probability theory, sampling theory and methodology, sampling distribution and hypothesis testing. Computer application is a compulsory component of this course. | |
| **Course Objectives** | * Students will learn to use the standard statistical tools employed in practical applications. * Students will learn to use statistical concepts for application in business and economics. * Students will learn to understand the application of common tools such as Standard Deviation, Probabilities, various statistical distribution tables, and Z-Test and T-Test. * Students will learn to understand and describe data classification and reporting using various tabular and graphical tools. | |
| **Student Learning Outcomes** | Upon the successful completion of this course, a student will be able to:   1. Present qualitative and/or quantitative data on tabular and/or graphical formats. 2. Calculate commonly used statistical tools such as mean, range, standard deviation, frequency, probability. 3. Learn to use the various statistical tables, such as the Table of BinomialProbabilities/Table of Poisson Probabilities/Standard Normal Distribution Table /t Distribution. 4. Utilize Z-test and t-test.   Note: Students will demonstrate above learning outcomes through one or more of the following: assignment, quiz, midterm exams, and final exam. | |

|  |
| --- |
| Textbook(s) |

**Text Book(s)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Author** | **Title** | **Edition & Year** | **Publisher** | **ISBN** |
| Mann, Prem | Introductory Statistics | Seventh Edition (2010) | JOHN WILEY & SONS, INC. | 978-0-470-44466-5 |

|  |
| --- |
| Reference book(s) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Paul Newbold** | Statistics for Business and Economics | Eighth Edition  (2013) | Prentice Hall | 978-0-13-274565-9 |

|  |
| --- |
| Teaching Strategy |

The instructor will present the concepts of statistics through lecture and guided discussion. The principles will be applied to a variety of business conditions and will be presented from a “real world perspective.” Classes will be conducted using a variety of methods. These will include lectures, small group discussions and exercises. You are encouraged to actively participate in all aspects of the class as significant learning occurs when all members of the class make contributions. I see my role as to facilitate learning through a varied and collaborative experience, not simply by lecturing.

|  |  |
| --- | --- |
| Assessment Strategy and Grading Scheme | |
| **Grading tool** | **Points** |
| Mid-1 | 20% |
| Mid-2 | 20% |
| Comprehensive Final Exam | 30% |
| Quiz | 15% |
| Assignment | 10% |
| Attendance and Class Participation | 05% |

**The final grade will be a percentage of the accumulation of all points received over the course as follow (eg: your earned points/total points)100**

|  |  |  |
| --- | --- | --- |
| 100%-93%=A | 79%-77%=C+ | 60%-66%=D |
| 92%-90%=A- | 76%-73%=C | 60% or less =F |
| 89%-87%=B+ | 72%-70%=C- |  |
| 86%-83%=B | 69%-67%=D+ |  |
| 82%-80%=B- |  |  |

**Note: This assigned percentage letter grade may be altered at the instructor’s discretion**

|  |
| --- |
| Class room Rules of Conduct |

1. Cellular phones should be “**turned off’**/“**Silent mode”** during the class.
2. Students are advised to frequently refer to the **Student Handbook of North South University** on the following link:

http://www.northsouth.edu/student-code-of-conduct.html

1. **Academic Integrity Policy:**

Academic dishonesty of any type will not be tolerated. This includes, but is not limited to, plagiarism (copying others work and representing it as our own—in part or in total— without tile appropriate citations) and copying others responses during the exams. In addition, classroom professionalism is to be maintained at all times. This means that when the professor is speaking or when Students are presenting their ideas, the classroom should he silent with the exception of invited questions. As in any academic environment questions are welcome, but informal chatter or communication among class members becomes a distraction for all those in attendance and will not be tolerated.

No talking or other forms of communication with other students will be allowed when exams are being distributed. The ‘no talking’ requirement is enforced during the exam and continues until all students have handed their exam in to the instructor. Any talking during the exam will disqualify you from taking the exam. It is my (and all other professors) expectation that your academic work for the course will be performed without resorting to cheating, plagiarism, lying, and/or bribery. Any student engaging in any of these behaviors will be dealt according to North South University's code of conduct.

|  |
| --- |
| Exams, Quiz & Make UP Policy |

There will be 9 quizzes throughout the semester. These will occur on an announced basis and will consist of problems and other types of questions related to assigned reading material. **There will be NO make ups on quizzes.** As you can see, attendance in this class has a direct impact upon your grade. Your quiz will be worth 15% of your grade. **Final exam will be comprehensive**. All exams will be given over the designated class period. There will be 10/12 problems in the exams. All the exams are worth 20**%** each, except final Exam (30%) and must be taken at the scheduled times. **Exams may not be made up unless arrangements are made prior to the class period for which they are scheduled**.

***Cell phones are prohibited in exam and quiz sessions.***

|  |
| --- |
| Attendance Policy |

In order to foster a collaborative learning experience where shared student participation is important, attendance is critical. We recognize situations may develop where you may miss class due to illness, unique family considerations. In such a case, you are still responsible to ensure your assignments are submitted on time and that you know the information covered in that session. Arriving late for class is rude, unprofessional, and detracts from the learning experience of your fellow students. Consistent tardiness has the following consequences. First late arrival - no penalty, second late arrival and thereafter - ½ %off final course grade. North South University mandates to fail students who are absent 25% or more from their classes, even if such absences are excusable.

|  |
| --- |
| **COURSE ADJUSTMENTS** |

I reserve the right to make adjustments in the course requirements consistent with the course’s overall objectives. Total course workload and available time will be considered in any such adjustments. You will be notified at the earliest possible time if changes are to be made.

|  |
| --- |
| **Communication Policy** |

Instructor will use his email to communicate with students. Students are responsible to check their emails regularly.

|  |
| --- |
| Appropriate Use Policy |

All members of the North South University community must use electronic communications in a responsible manner. The University may restrict the use of its computers and network systems for electronic communications subject to violations of university policies/codes or local laws or national laws. Also, the university reserves the right to limit access to its networks through university-owned or other computers, and to remove or limit access to material posted on university-owned computers.

|  |
| --- |
| Students With Special Needs |

North South University will provide educational opportunities that ensure fair, appropriate and reasonable accommodation to students who have disabilities/special needs that may affect their ability to participate in course activities or meet course requirements. Students with disabilities are encouraged to contact their instructors to ensure that their needs are met. The University through its Special Need section will exert all efforts to accommodate special needs.

|  |
| --- |
| Students Complaints Policy |

Students at North South University have the right to pursue complaints related to faculty, staff, and other students.  The nature of the complaints may be either academic or non-academic.  For more information about the policy and processes related to this policy, you may refer to the students’ handbook.

|  |
| --- |
| **Course Contents &Schedule** |

The following is a **TENTATIVE** schedule based on academic calendar published on September, **2014** that may change as the semester progresses. Please read the material prior to attending the class where it will be discussed

|  |  |  |
| --- | --- | --- |
| **Session #** | **Topic** | **Chapter** |
| 1 | Introduction | 1 |
| 2 | Organizing and Graphing Data | 2 |
| 3 | Organizing and Graphing Data | 2 |
| 4 | Numerical Descriptive Measures | 3 |
| 5 | Numerical Descriptive Measures | 3 |
| 6 | Numerical Descriptive Measure | 3 |
| 7 | **Mid-1 exam** | **1 - 3** |
| 8 | Probability | 4 |
| 9 | Probability | 4 |
| 10 | Probability | 4 |
| 11 | Discrete Random Variables and Their Probability Distributions | 5 |
| 12 | Discrete Random Variables and Their Probability Distributions | 5 |
| 13 | Discrete Random Variables and Their Probability Distributions | 5 |
| 14 | The Normal Distribution and Other Continuous Distributions | 6 |
| 15 | The Normal Distribution and Other Continuous Distributions | 6 |
| 16 | **Mid-2 Exam** | **4-6** |
| 17 | Sampling and Sampling Distributions | 7 |
| 18 | Sampling and Sampling Distributions | 7 |
| 19 | Confidence Interval Estimation | 8 |
| 20 | Confidence Interval Estimation | 8 |
| 21 | Fundamentals of Hypothesis Testing: One-Sample Tests | 9 |
| 22 | Fundamentals of Hypothesis Testing: One-Sample Tests | 9 |
| 23 | Fundamentals of Hypothesis Testing: One-Sample Tests | 9 |
| 24 | **Review for Final Exam** | **7 – 9** |

**Note: The instructor reserves the right to make changes to the syllabus if necessary.**