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**NORTH SOUTH UNIVERSITY**

**Center of Excellence in higher Education**

**The first private university in Bangladesh**

**School of Business**

**Department of Management**

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| **Course Name:**  | Introduction to Statistics |
| **Course Code** **& Section No:** | BUS 172 Section: 20,24 |
| **Semester:** | Spring 2017 |

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| Instructor & Department Information  |
| 1. **Instructor Name:**
 | Syed Riaz Mahmood Ali |
| 1. **Office**
 | NAC 871 |
| 1. **Office Hours:**
 | ST : 11.10 am – 12.10 pm, 2.30 pm-3.30 pm MW : 11.10 am – 12.10 pm, 2.30 pm-3.30 pm  |
| 1. **Office Phone:**
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| 1. **Email Address:**
 | syed.ali@northsouth.edu riaz.ahc@gmail.com |
| 1. **Department:**
 | Management |
| 1. **Links:**
 | riazmahmood.weebly.com |

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| Course & Section Information  |
| **Class Time & Location** | Sunday & Tuesday1.00 pm – 2.30 pm NAC 2069.40 pm – 11.10 pm NAC 203 |
| **Course Prerequisite(s)** | BUS 172 |
| **Course Credit Hours** | 3:0 |
| **Course Description** |

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| The course is designed as a rigorous introduction to statistics for economics and business students. For most of you this will be your first course in statistics. For this reason, one of the goals of the course is to introduce you to many new concepts and techniques, as well as interesting applications of these concepts. We will also learn to use the same statistical tools employed by professional statisticians. This course does not have the level of technical difficulty of more advanced statistics courses. However, the large range of topics covered can make this course challenging. The best way to succeed is to review the material after every lecture. If you follow this advice you will do well in this course. |

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| **Course Objectives** | The course contents are designed to give students a clear idea about:* Introductory concepts of statistical issues.
* How to group and present data
* Numerical descriptive measures
* Probability issues and different distributions
* Discrete and continuous random variable
* Fundamental Concept of hypothesis testing
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| **Student Learning Outcomes** | • Learn how to construct and interpret graphical and numerical summaries of data • Understand many of the fundamental ideas of statistics, such as variability, distribution, sampling • Understand how the nature of data collection methods affects the scope of the conclusions that can be drawn from statistical studies (especially cause and effect); the role of probability in sampling and experiments • Learn the normal distribution and the Central Limit Theorem • Learn the basics of statistical inference: estimation, assessing statistical significance, statistical reasoning; apply and interpret the results of a variety of statistical techniques  |

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|  Textbook(s)  |

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| **Author**  | **Title**  | **Edition & Year** | **Publisher** | **ISBN** |
| Mann, Prem | Introductory Statistics | 8th Edition | JOHN WILEY & SONS, INC. |  |

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| 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.

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| Assessment Strategy and Grading Scheme |
| **Grading tool** | **Points** |
| First Exam | 25% |
| Second Exam | 25% |
| Quiz | 10% |
| Final Exam | 25% |
| Home work | 10% |
| Attendance  | 5% |

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

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| 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**

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| 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.

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| Exams, Quiz & Make UP Policy |

**Quiz may or may not be announced andmaynot be made up for any reason**. All exams will be given over the designated class period. The exams 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 sessions.***

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| 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 a student may miss class due to illness, unique family considerations. In such a case, the student isstill responsible to ensure his/her assignments are submitted on time and that the information covered in that session is collected properly. 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.

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| **COURSE ADJUSTMENTS** |

The lecturer reserves 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.

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| **COMMUNICATION POLICY** |

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

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| 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.

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| 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.

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| 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 outline
BUS 172: Introduction to Statistics**

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