



58/11/A, Panthapath, Dhaka-1205

Course Profile

Faculty	Business Administration		
Program	BBA		
Course Code	STA 321		
Course Title	Statistical Decision Making		
Course Instructor	Fakhrul Islam Lecturer Department of Business Administration E-Mail: romanaiscu@yahoo.com Victoria University of Bangladesh		
Status	Compulsory		
Credit Hours	3 Credit hours		
Teaching Methodology	Class Attendance Work sheet Assignment Mid-Term Final-Term		
Evaluation Method	Class Attendance.....05% Work Sheet/Term Paper.....20% Assignment.....10% Mid-Term.....25% Final-Term..... 40%		
Grading System	Numerical Grade	Letter Grade	Grade Point
	80% and above	A+ (A Plus)	4.00
	75% to less than 80%	A (A Regular)	3.75
	70% to less than 75%	A- (A Minus)	3.50
	65% to less than 70%	B+ (B Plus)	3.25
	60% to less than 65%	B (B Regular)	3.00
	55% to less than 60%	B- (B Minus)	2.75
	50% to less than 55%	C+ (C Plus)	2.50
	45% to less than 50%	C (Regular)	2.25
	40% to less than 45%	D (Regular)	2.00
Less than 40%	F (Fail)	0.00	
Course Objective	To help students better understand some of the more difficult topics about the methods of obtaining and analyzing data in order to take decision by statistical measurement.		
Book(s)	Basic Texts: 1. S. P. Gupta & M.P. Gupta, Business Statistics. Reference Books: 1. Howard L. balsley, Basic Statistics for Business and Statistics. 2. Mason & Lind, Statistical Techniques in Business and Economics.		

Lecture Plan

Lecture No.	Main Topic	Sub-topics
1 st to 3 rd	<u>Chapter 01 :</u> Index number	Price Index, Quality Index, Value Index, Cost of Living Index Numbers, Chain Index Number, Base Shifting, Splicing and Deflating the Index, Test of Index Numbers, Limitations and Usages.
4 th to 6 th	<u>Chapter 02:</u> Business Forecasting and Time Series Analysis	Steps in Forecasting, Methods of Forecasting, Time Series Analysis, Components of Time Series, Measures of Trends, Graphic Method, Method of Semi Averages and Moving Averages.
7 th to 9 th	<u>Chapter 03:</u> Probability	Meaning of Probability, Elements of Set Theory, Sample Space, Events, Theorems of Total and Compound Probability, Conditional Probability and Statistical Independence, Expected Value of Random Variable.
10 th to 12 th	<u>Chapter 04:</u> Probability Distribution	Random Variable, Probability Function, Binomial Distribution, Poisson Distribution, Negative Binomial Distribution, Multinomial Distribution, Hyper geometric Distribution, Normal Distribution, Uniform Distribution, Exponential Distribution.
<u>Mid-Term Exam</u>		
13 th to 15 th	<u>Chapter 05:</u> Sampling and Sampling Distribution	Introduction, Purpose of Sampling, Principles of sampling, Methods of sampling, Size of Sample, Merits of Sampling Methods, Limitation of sampling, Sampling and Sampling Errors, Sampling distributions.

16 th to 18 th	Chapter 06: Tests of Hypothesis	Introduction, Procedure of Testing Hypothesis, Type I and Type II Errors, One – Tailed and Two – Tailed Tests, Tests of Hypothesis Concerning Large Sample, Testing Hypothesis about Population Mean, Testing Hypothesis about the Difference between two Means, Test of Hypothesis concerning Attributes, Testing Hypothesis about Population Proportion.
19 th to 22 st	Chapter 07: Small Sampling Theory	Introduction, Properties of t – Distribution, Test of Hypothesis about the Population Mean, Test of Hypothesis concerning the Difference between two Means, Concerning the Correlation, F – Distribution.
22 nd & 23 rd	Chapter 08: Chi – Square Test	Introduction, Chi-Square Distribution, Chi-Square Test, Yate’s Corrections for Continuity, Grouping when Frequencies are Small, Tests of Hypothesis concerning Variance, Test of Independence, Test of Goodness Fit, Cautions while Applying Chi-Square Test.
24 th	Overall Class Review & Presentation	
<u>Final Exam</u>		

Instructions for Assignments & Term Paper :

To be announced in the class

Examination Rules:

According to the existing Examination Policy of VUB

Others:

Any other issues & queries related to the course will be discussed and explained as and when required.