



DEPARTMENT OF MANAGEMENT STUDIES
NATIONAL INSTITUTE OF TECHNOLOGY
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COURSE PLAN – PART I			
Course Title	BUSINESS STATISTICS		
Course Code	MB 713	No. of Credits	2
Course Code of Pre-requisite subject(s)	NIL		
Session	July' 23 – October '23	Section	
Name of Faculty	Dr. P.Sridevi	Department	MBA
Email	psridevi@nitt.edu	Telephone No.	041-2503711
Name of Course Coordinator(s) (if, applicable)	NIL		
E-mail		Telephone No.	
Course Type	<input checked="" type="checkbox"/> Core course	<input type="checkbox"/> Elective course	

SYLLABUS

Unit I Inferential and Descriptive statistics:

Introduction to Statistics-Measures of Central Tendency and Measures of Dispersion in Frequency Distribution

Unit II Probability Theory

Rules – Probability under conditions of Statistical independence and dependence - Bayes Theorem –Probability Distributions-Binomial, Poisson and Normal distribution.

Unit III Sampling Distribution

Sampling and Sampling Distribution: Types of sampling -Concept of Standard Error - Sampling from normal and non-normal population - Central Limit Theorem.

Unit IV Hypotheses Testing

Testing Hypotheses Significance level-Type & Type II error-One tail and Two tail tests — Hypothesis Testing of means, proportion- z-test, t- test, Chi-Square Test- F distribution, Analysis of variance(ANOVA)-One way and Two way ANOVA –Introduction to simple regression and correlation.

Unit V Non Parametric methods

-Non Parametric methods Kolmogorov Test-Median Test –Mann –Whitney U-Test – Wilcoxon matched pair T - Test - Kruskal Wallis Test.

COURSE OBJECTIVES	
<i>To create an understanding on different statistical techniques for data analysis and decision making in business perspective</i>	
COURSE OUTCOMES (CO)	
Course Outcomes	Aligned Programme Outcomes (PO)
1. To understand the characteristics of data and methods taken for the study	2, 3
2. To analyze data using different statistical methods	3, 5, 6
3. To develop decision making skills by analysis results	3, 4, 5
4. To better understand business problems and develop problem solving skills	1, 2, 3, 5, 6

COURSE PLAN – PART II			
COURSE OVERVIEW			
This course describes statistics techniques on business perspectives			
COURSE TEACHING AND LEARNING ACTIVITIES			
Sl.No.	Week	Topic	Mode of Delivery
1.	4 th week of July 2022 Class – 1 st week (3 Contact Hours)	Introduction to statistics- Arranging data-constructing & graphing frequency distribution	Lecture - Power Point Presentation
2.	Class- 2 nd week (3 Contact Hours)	Measures of central tendency and measures of Dispersion in Frequency Distribution	Lecture - Power Point Presentation
3.	Class- 3 rd week (3 Contact Hours)	Probability Theory: classical, objective & subjective Approach-Addition, Multiplication (Assessment-2)	Lecture - Power Point Presentation & board
4.	Class- 4 th week (3 Contact Hours)	Bayes Theorem –Applications Binomial, Poisson and Normal distribution (Assignment topic to be discussed – Problem/ Case)	Lecture - Power Point Presentation
5.	Class- 5 th week (3 Contact Hours)	Sampling and Sampling Distribution: Types of sampling —Random Sampling-Concept of Standard Error.	Lecture - Power Point Presentation
6.	Class- 6 th week (3 Contact Hours)	Sampling from normal and non-normal population-Central Limit Theorem	Lecture - Power Point Presentation
7.	7 th week	Cycle Test for I Trimester / MBA scheduled	
8.	Class- 8 th week (3 Contact Hours)	Mean, variance and proportion-student-t distribution	Lecture - Power Point Presentation
9.	Class – 9 th week (3 Contact Hours)	Testing Hypotheses Significance level-Type I & Type II error- one Two tail tests — Hypothesis Testing of means, proportion-Chi-Square Test-Analysis of variance	Lecture - Power Point Presentation
10.	Class - 10 th week (3 Contact Hours)	One way and Two way ANOVA- Introduction to simple regression and correlation.	Lecture - Power Point Presentation
11.	Class – 11 th week (3 Contact Hours)	Non Parametric methods Kolmogorov Test-Median Test – Mann –Whitney U-Test – Wilcoxon T Test (Assessment-3)	Lecture - Power Point Presentation

12	11 th week (3 hours)	Tutorial on 75% portions covered (Tutorial Assessment**) – on additional hours	Problem solving by students
13	Class – 12 th week (3 Contact Hours)	Kruskal Wallis Test	Lecture - Power Point Presentation ** Evaluation out off contact hours if required**
14	October 23	Trimester Exam Begins	

TEXT / REFERENCES:

1. Richard I. Levin and David S. Rubin, 'Statistics for Management', Prentice Hall of India, 8th edition' (2017).
2. Srivatasava, Shenoy and Sharma, 'Quantitative Techniques for Managerial Decision Making', New Age International Pvt. Ltd.,3rd edition, (2011).
3. G C Beri, " Business Statistics", Tata Mc Graw Hill, 3rd edition,(2017).
4. T N Srivastava, Shailaja rego, "Statistics for management", Tata McGraw - Hill Publishing Company Ltd.,3rd edition (2017).
5. Linda Herkenhoff, John Fogli, "Applied Statistics for Business and Management using Microsoft Excel", Springer, 1st edition, (2013).
6. Donald R. Cooper, Pamela S. Schindler and J K Sharma, "Business Research Methods", Tata Mc Graw Hill, 12th Edition (2018).
7. Uma Sekaran and Roger Bougie, "Research methods for Business", Wiley India, 8th Edition, (2019).

COURSE ASSESSMENT METHODS

Sl. No.	Mode of Assessment	Week / Date	Remarks	% Weightage
1.	Cycle Test	7 th week - 2023		25%
2.	Case Study (Assignment – 001 & Formulation of case)	Will beAssigned 3 rd Week	Phase I Due - September 2023 – 5% Phase II Due – October 20223– 5%	10%
3.	Tutorial +Excel certification	11 th week of the course 2023	Tutorial – 10% Certification Basic or any Level (Online – 5%)	15%
4.	Trimester Examination	October 2023	2 Hours	50%

Note:

- A. Attending all the assessments (Assessment 1 to 4) is MANDATORY for every student.
- B. Passing minimum for the course shall be the Class Average/2. If not scoring the minimum, the student would be declared fail and 'F' grade will be awarded.

COURSE EXIT SURVEY

- Feedbacks are collected before final examination through MIS as per the institute guidelines
- Students, through their Class Representatives, may give their feedback at any time to the course faculty which will be duly addressed.

The students may also give their feedback during Class Committee Meeting.

- Medical Certificate / On Duty Certificate should be submitted immediately after rejoining.

COMPENSATION ASSESSMENT:

- One compensation assessment will be given after completion of Cycle test for the students those who are absent for any assessment due to genuine reason.
- The prior permission and required document must be submitted for absence.

ACADEMIC HONESTY & PLAGIARISM:

- Academic ethics to be followed during course
- The students are expected to come out with their original solution for the problems given in the assignment. If found to copy from internet/other students, marks will be reduced.
- Need to maintain honesty & discipline in class and exam

ADDITIONAL INFORMATION

- The students can get their doubts clarified at any time with their faculty member with prior appointment.

FOR APPROVAL



Dr. P.SRIDEVI
Course Faculty



Dr. G.Muruganantham
Chairman (Class Committee)



Dr. G.Muruganantham
HoD