

# DEPARTMENT OF MANAGEMENT STUDIES NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI - 620 015, TAMIL NADU, INDIA

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	COURSE PLAN	- PART I	
Course Title	BUSINESS STAT	TISTICS	
Course Code	MB 701	No. of Credits	2
Course Code of Pre-requisite subject(s)	NIL		
Session	JULY- OCT 2018	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	V Core course	Electi	ive course
SYLLABUS			
Unit I Measures of Central Ter			
Introduction to statistics-Collecti	ng & tabulating data	- Measure of Centra	al Tendency and
Dispersion in Frequency Distribu	ation- Probability The	cory: classical, object	ctive & subjective
Approach-Addition, Multiplicati Unit II Probability Distribution	on & Bayes Theorem	-Applications	
Binomial, Poisson and Normal -		ler certainty uncert	ainty and Diele
Unit III Sampling Distribution	& Estimation	ici cortainty, uncert	anity and Risk
Sampling and Sampling Distribu	tion: Types of sampli	ng —Random Sam	pling-Concept of Standard
Error Central Limit Theorem. Es	timation: Types of es	timates-Point Estim	nate, Interval estimate of
their population mean, variance a	and proportion-studen	t-t distribution.	
Unit IV Hypotheses Testing			
Testing Hypotheses Significance	level-Type & Type I	I error- one Two tai	il tests —Hypothesis
Testing of means, proportion-Ch Unit V Non Parametric method	1-Square Test-Analys	is of variance.	
Non Parametric methods Kolmog		est - Mann - Whitne	ev Test - Wilcovon T Test
- Friedman ANOVA-Monemar	Test-Cochram's Q Test	st.	by rest wheoxon r rest
COURSE OBJECTIVES			
To create an understanding on d	ifferent statistical tech	nniques for data an	alysis and decision making
COURSE OUTCOMES (CO)	<i>y</i>	Jos Jor data an	any sis and decision making

Course Outcomes	Aligned Programme Outcomes (PO)
To understand the characteristics of data and methods taken for the study	2, 5
2. To analyze data using different statistical methods	3, 5, 6
3. To develop decision making skills by analysis results	3, 4, 5
<ol> <li>To better understand business problems and develop problem solving skills</li> </ol>	1, 2, 3, 5, 6

COOR	RSE OVERVIEW		
COX	This course describes statistic	es techniques on business perspectives	
COUR	<b>CSE TEACHING AND LEAD</b>	RNING ACTIVITIES	
Sl.No.	Week	Topic	Mode of Delivery
1.	2 <sup>nd</sup> week of July 2018 Class – 1 <sup>st</sup> week (3 Contact Hours)	Introduction to statistics-Collecting & tabulating data - Measure of Central Tendency	Lecture - Power Point Presentation & board
2.	Class- 2 <sup>nd</sup> week (3 Contact Hours)	Dispersion in Frequency Distribution- Probability Theory: classical, objective & subjective Approach- Addition, Multiplication & Bayes Theorem – Applications	Lecture - Power Point Presentation & board
3.	Class- 3 <sup>rd</sup> week (3 Contact Hours)	Binomial, Poisson and Normal distribution	Lecture - Power Poir Presentation & board
4.	Class- 4 <sup>th</sup> week (3Contact Hours)	Decision Making under certainty, uncertainty and Risk (Assignment topic to be discussed – Problem/ Case)	Lecture - Power Poir Presentation
5.	Class- 5 <sup>th</sup> week (3 Contact Hours)	Sampling and Sampling Distribution: Types of sampling —Random Sampling-Concept of Standard Error Central Limit Theorem.	Lecture - Power Poir Presentation & board
6.	Class- 6 <sup>th</sup> week (3 Contact Hours)	Estimation: Types of estimates-Point Estimate, Interval estimate of their population	Lecture - Power Poin Presentation & board
7.	7 <sup>th</sup> week	Cycle Test for I Trimester / MBA scheduled	EXCEL orientation workshop - Industry expert (Depends on exper availability)
8.	Class- 8 <sup>th</sup> week (3 Contact Hours)	Mean, variance and proportion-student-t distribution	Lecture - Power Poin Presentation & board
9.	Class – 9 <sup>th</sup> week (3 Contact Hours)	Testing Hypotheses Significance level-Type & Type II error- one Two tail tests —	Lecture - Power Poin Presentation & board
10.	Class - 10 <sup>th</sup> week (3 Contact Hours)	Hypothesis Testing of means, proportion-Chi-Square Test-Analysis of variance.	Lecture - Power Point Presentation & board
11.	Class – 11 <sup>th</sup> week (3 Contact Hours)	Non Parametric methods Kolmogorov Test-Median Test – Mann – Whitney Test – Wilcoxon T Test –	Lecture - Power Point Presentation & board
12.	11th week (3 hours)	Tutorial on 75% portions covered (Tutorial Assessment**) – on additional hours	Problem solving by students
13.	Class – 12 <sup>th</sup> week (3 Contact Hours)	Friedman ANOVA-Mcnemar Test-Cochram's Q Test.	Lecture - Power Point Presentation

			** Evaluation out off contact hours if required**
14.	October 2018	Trimester Exam Begins	*

### TEXT / REFERENCES:

- 1. Richard I. Levin and David S. Rubin, 'Statistics for Management', Prentice Hall of India, 12h edition' 2011
- 2. Srivatasava, Shenoy and Sharma, 'Quantitative Techniques for Managerial Decision Making', New Age International Pvt. Ltd.,2nd edition, 2002.
- 3. G C Beri, "Business Statistics", Tata Mc Graw Hill, 3rd edition, 2009.

SI. No.	Mode of Assessment	Week / Date	Remarks	% Weightage
1.	Assessment 1	7 <sup>th</sup> week - 2018	1 hour 30 Minutes	25%
2.	Assignment	Will beAssigned 4 <sup>th</sup> Week	Submit during end term	10%
3.	Tutorial	11 <sup>th</sup> week of the course 2018	Class room understanding evaluation	15%
4.	Trimester Examination	October 2018	3 Hours	50%

### Note:

- A.Attending all the assessments (Assessment 1 to 4) is MANDATORY for every student.
- B. Every student is expected to score minimum 40% (i.e., 40 marks) to pass the course. Otherwise the student would be declared fail and 'F' grade will be awarded.

### COURSE EXIT SURVEY

- Feedbacks are collected before final examination through MIS or any other standard format followed by the institute
- 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.

# ATTENDANCE:

- Minimum 75% is mandatory to write the trimester examination. Students having attendance 65% to 74% are eligible for the end semester exam only after attending the extra classes and submitting assignments. Students have to redo the course, if they have less than 65% of attendance.
- Medical Certificate / On Duty Certificate should be submitted immediately after rejoining.

# **COMPENSATION ASSESSMENT:**

- One compensation assessment will be given after completion of Assessment 1 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:**

- Avoid usage of electronic devices at classes, test and exam.

- 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 room and exam hall

## ADDITIONAL INFORMATION

- The students can get their doubts clarified at any time with their faculty member with prior appointment.
- Excel induction workshop date will be intimated based on expert availability

FOR APPROVAL

P.SRIDEVI Course Faculty

Chairman (Class Committee)

Dr.B.Senthil Arasu