# K L University Department of K L U BUSINESS SCHOOL Course Handout for II Year BBA-MBA PROGRAM A.Y.2017-18, IV Semester

Course Name : BUSINESS RESEARCH METHODS

Course Code : 15BB22C4

L-T-Pstructure : 3-2-0

Course Credits : 4

Course Coordinator : Dr. Deepa

Course Instructors : Dr. Deepa

Course Teaching Associates : NA

# **Course Objective:**

i) Understand the fundamental concepts of business research methods

- ii) To lay foundation for various statistical tools and techniques used in business research.
- iii) To introduce various managerial decision making models
- iv) able to present the report writing skills in research

Course Rationale: The objective of this course is to introduce students to methods of research. They will be guided to develop a range of skills to facilitate independent researchbasedlearning and the interpretation of research findings. It will provide a scope forthe student to demonstrate intellectual and practical skills, which willprove vital for future career development. This will focus on the analysis ofbusiness problems and the use of scientific research as a problem-solving tool. This encompasses the understanding and application of appropriate research designs, statistics for data analysis and report writing and presentation.

### Course Outcomes (CO):

СО	СО	so	BTL
No:			
CO1	Understand the fundamental concepts of business research methods i.e., formulation and designing the	a, e	2
	problem and various sample selection techniques		
CO2	Understand the preliminaries of research problem in the context of data collection and processing	a, e	2
CO3	Tests the significance of various parameters of research problem through inferential statistical techniques	a, e	3
	and the forecasting analysis of the research problem.		
CO4	Comparison of more than two population with respect to averages based on analysis of variance and	a, e	4
	experimental designs and also able to understand various research report skills		

### COURSE OUTCOME INDICATORS (COI):

CO No.	COI-1	COI-2	COI-3
CO1	Illustrate the formulation of research problem	Outline the hypothesis and preparation of research design	Demonstrate techniques of sampling selection
CO2	Summarize the questionnaire for a research problem for collecting of data	Outline various methods of data collection	Classification and tabulation of the data in the form of table
CO3	Estimation of the data various descriptive statistics	Test the significance of descriptive statistics by using inferential statistical techniques	Estimation and forecasting the trends of the given data by using trend analysis
CO4	Outline the mechanism of report writing by clearly understanding the significance of research problem	Comparison of more than two population means through Analysis of Variance Techniques	Analyze various experimental designs like, C.RD, R.B.D and L.S.D through principles of experimental designs

### **SYLLABUS (As approved by BOS):**

**Introduction:** Definition and Objectives of Research-Types of Business Research-Research process-Defining research problem and Sources of Research Problem, review of literature. Hypothesis formulation, Research design-Types-Sampling designs: Concepts, types and their applicability.

**Data Collection and Processing:** Primary data and Secondary data; Scaling Methods and Scaling of techniques: Turnstone, Likert and semantic differentials. Methods of collection of Primary data and secondary data: Observation Method Interview method, Questionnaire design, periodicals and newspapers, Characteristics of good questionnaire/schedule. Data processing: Editing, Coding and Tabulation of data.

**Data analysis, interpretation and forecasting:** meaning of data analysis and its types-descriptive and inferential statistics (measures of central tendencies, measures of dispersions, test for means, test for association). Forecasting: Forecasting Methods: Simple Moving Average Method, Weighted Moving Average Method, Exponential Smoothing method; Trend Analysis.

**Research Design**: Research Designs: Meaning, Need and Features of Completely Randomized Design, Randomized Block Design, Latin Square Design.

**Report Writing**: Significance of report writing, Types of reports, Steps in report writing, Layout of research report, Mechanics of report writing, precautions in research reporting.

### **BOS** Approved Text books:

- 1.C.R Kothari, Research Methodology Methods & Techniques, 2/e, VishwaPrakashan, 2009
- 2.Levin, Richard and Rubin, David, Statistics for Management, 7/e: Pearson, 2011.

### **BOS** Approved Reference Books:

- 1.Gaur, Statistical Methods for Practice and Research, Sage Publication, 2009
- 2.Bhandarkar& Wilkinson, Methodology and Techniques of Social Research, Himalaya, 2004
- 3. DipakKumar. Bhattacharya, *Research Methodology*, Excel Books, 2009.

Other Books, References: (As recommended for reference by the course team, if any): NIL

Deviations (if any) from **BOS** approved syllabus and the topics planned: NIL

(Clearly state each deviation and give brief explanation on justifying the deviation)

### **COURSE DELIVERY PLAN:**

Sess. No.	СО	COI	Topic (s)	Teaching-Learning Methods	Evaluation Components
1	I	1	Course Handout	Lecture	·
2	I	1	Introduction to research (Definition and Objectives)		
3	1	1	Types of research		
4	1	1	Research process		Assignment-I, in
5	1	1	Review of literature		semester-I (Test-
6	1	2	Hypothesis formulation	Lecture and	I) and end
7	1	2	Research design	interaction	semester
8	1	3	Sampling designs		examination
9	1	3	Probability sampling techniques		
10	1	3	Non-probabilistic sampling methods		
11	1	3	Sampling and non-sampling errors		
12	11	2	Primary and secondary data	Lecture and	
13	II	2	Primary Data Collection Methods	interaction	Assignment II in
14	II	2	Secondary Data Collection Methods		Assignment-II, in semester-II (Test-
15	II	2	Scaling methods		II) and end
16	=	2	Scaling techniques		semester
17	П	2	Attitude measurement		examination
18	П	1	Criteria for good measurement		S.G.IIIIIGEIOII
19	П	1	Questionnaire design		
20	=	1	Characteristics of good Questionnaire / schedule		

21	Ш	3	Data process, editing and coding		
22	Ш	3	Tabulation of data		
23	Ш	1	Uni-Variate data analysis		
24	Ш	2	Uni-Variate data analysis		Assignment-III, in
25	111	3	Introduction to forecasting methods		semester-III
26	111	3	Simple moving average method	Lecture, problem	(Test-III) and end
27	III	3	Simple Moving average method	solving and Tutorial	semester
28	111	3	Exponential smoothing method		examination
29	111	3	Exponential smoothing method		
30	III	3	Trend analysis		
31	IV	1	Introduction to research designs		
32	IV	1	One way ANOVA		
33	IV	1	Two way ANOVA		
34	IV	2	C.R. Design – equal classes		
35	IV	2	C.R. Design – unequal classes		
36	IV	2	R.B. design		
37	IV	2	R.B. design	Lactura problem	End semester
38	1V	2	Latin Square Design	Lecture, problem solving and Tutorial	examinations
39	IV	2	Latin Square Design	Solving and rutorial	examinations
40	IV	3	Report writing		
41	IV	3	Types of reports		
42	IV	3	Steps in report writing		
43	IV	3	Layout of research report		
44	IV	3	Mechanics of research report		
45	IV	3	Precautions in research report		

# **Session wise Teaching – Learning Plan**

Session 1 : After this session the student will be able to understand the importance of the course, know the evaluation system

Time in Minutes	Торіс	BTL	Teaching-Learning Method
45	Course Handout (course outcomes and indicators, syllabus, ERP Usage, Examination Pattern	2	
05	Summary on the session		

Session 2 : After this session the student will be able to Understand the definition			Teaching-Learning Method
and uses of re	search		
Time in	Торіс		
Minutes	Торіс		
10	Concept of research, research methodology	2	Lecture, interaction
30	Definition, meaning and preliminaries on research and its	2	Lecture, interaction
	significance		
10	Summary on the session		

Session 3 : After this session the student will be able to understand and identify the various types of research and differences among them

Time in Minutes	Торіс	BTL	Teaching-Learning Method
05	Recap		
10	Classification of Research		
25	Pure and Applied Research, Exploratory and Formulative research, Descriptive Research, Diagnostic research	2	Lecture, interaction
05	Verify and interaction		
05	Summary on the session		

Session 4: After this session the student will be able to understand the various steps involved in research process					
Time in Minutes	Topic	BTL	Teaching-Learning Method		
05	Recap				
30	Research process (sources of problems, process of identification, criteria for selection)	2	Lecture, interaction		
10	Verify and interaction				
05	Summary on the session				

Session 5: After this session the student will be able to understand the reasons of reviewing the literature for critically analysis					
Time in Minutes	Торіс	BTL	Teaching-Learning Method		
05	Recap		Lecture, interaction		
30	Review of literature	2			
10	Verify and interaction				
05	Summary on the session				

Session 6: after this session the students will be able to demonstrate the types of hypothesis based on research objective				
Time in	Topic	BTL	Teaching-Learning Method	
Minutes	1.00.0	J	reacting realting wethou	
05	Recap			
30	Hypothesis types and formulation	2	l a store a internation	
10	Verify and interaction		Lecture, interaction	
05	Summary on the session			

Session 7: after this session the students will be able to understand meaning and importance of research design					
Time in Minutes	Topic	BTL	Teaching-Learning Method		
05	Recap		Lecture, interaction		
30	Need and importance of research design	2			
10	Verify and interaction				
05	Summary on the session				

Session 8 : After this session the student will be able to understand various types of sampling selections					
Time in Minutes	Торіс	BTL	Teaching-Learning Method		
05	Recap				
30	Sampling selections	2			
10	Verify and interaction		Lecture, interaction		
05	Summary on the session		,		

Session 9 : After this session the student will be able to identify where each techniques is applicable for data collection					
Time in	Topic	BTL	Teaching-Learning Method		
Minutes	Торіс	DIL	reaching-Learning Wethou		
05	Recap				
30	Random sampling techniques	2	Lookuma intornation		
10	Verify and interaction		Lecture, interaction		
05	Summary on the session				

Session 10 : After this session the student will be able to understand and identify the difference between probability and non-probability sampling techniques

Time in Minutes	Торіс	BTL	Teaching-Learning Method
05	Recap		
30	Non-random sampling techniques	2	Lecture, interaction
10	Verify and interaction		

05 Summary on the session
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Session 11: After this session the student will be able to Identify the difference between sampling and non-sampling errors					
Time in Minutes	Торіс	BTL	Teaching-Learning Method		
05	Recap				
30	Errors in sampling	2	Lastura interaction		
10	Verify and interaction		Lecture, interaction		
05	Summary on the session				

Session 12: After this session the student will be able to Understand the advantages and disadvantages of primary and secondary data

secondary dar	.a		
Time in	Topic	BTL	Teaching-Learning Method
Minutes	Торіс		
05	Recap		
30	Primary and secondary data	2	Lastura interaction
10	Verify and interaction		Lecture, interaction
05	Summary on the session		

Session 13: After this session the student will be able to illustrate methods of data collection					
Time in Minutes	Topic	BTL	Teaching-Learning Method		
05	Recap				
30	Primary data collection methods	2	Lecture, interaction		
10	Verify and interaction		- Lecture, interaction		
05	Summary on the session				

Session 14: After this session the student will be able to illustrate methods of data collection					
Time in	Tonic	BTL	Teaching-Learning Method		
Minutes	Topic				
05	Recap		Lecture, interaction		
30	Secondary data collection	2			
10	Verify and interaction				
05	Summary on the session				

Session 15: After this session the student will be able to understand the uses and differences between nominal, ordinal, interval and ratio data

Time in Minutes	Topic	BTL	Teaching-Learning Method
05	Recap		
30	Scaling Methods	2	Lecture, interaction
10	Verify and interaction		
05	Summary on the session		

Session 16: After this session the student will be able to understand various scaling techniques					
Time in	n BT	BTL	Teaching-Learning Method		
Minutes	Topic				
05	Recap		Lecture, interaction		
30	Scaling techniques	2			
10	Verify and interaction				
05	Summary on the session				

Session 17: After this session the student will be able to understand the behavior and socio-economics status					
Time in	Topic BTL Teaching-Learning Method				
Minutes	Торіс				
05	Recap		Lecture, interaction		

30	Attitude measurement	2
10	Verify and interaction	
05	Summary on the session	

Session 18: After this session the student will be able to illustrate the various criteria's forGood measurement by reliability and validity of data

variately of data					
Time in	Topic	BTL	Teaching-Learning Method		
Minutes	Topic				
05	Recap				
30	Criteria for good measurement	2	Lastura interaction		
10	Verify and interaction		Lecture, interaction		
05	Summary on the session				

Session 19:	Session 19: After this session the student will be able to identify the steps for designing the questionnaire effectively					
Time in Minutes	Topic	BTL	Teaching-Learning Method			
05	Recap					
30	Questionnaire design	2	Lastura interaction			
10	Verify and interaction		Lecture, interaction			
05	Summary on the session		!			

Session 20: After this session the student will be able to understand the Characteristics of good questionnaire					
Time in	Topic		Teaching-Learning Method		
Minutes	Торіс				
05	Recap				
31	Characteristics of good questionnaire	2	Lactura interaction		
10	Verify and interaction		Lecture, interaction		
05	Summary on the session				

Session 21: After this session the student will be able to understand illustrate data editing and coding techniques					
Time in Minutes	Topic	BTL	Teaching-Learning Method		
05	Recap				
35	Data processing, editing and coding	2	Lastura practica		
05	Verify and interaction		Lecture, practice		
05	Summary on the session				

Session 22: After this session the student will be able to understand Tabulation of data based on characteristics of data					
Time in Minutes	Торіс	BTL	Teaching-Learning Method		
05	Recap				
35	Tabulation of data	2	Lastura musatias		
10	Verify and interaction		Lecture, practice		
05	Summary on the session				

Session 23 : Afte	r this session the stud	dent will be able to estimate	various measures of	location values
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Time in Minutes	Торіс	BTL	Teaching-Learning Method
05	Recap		
35	Uni-variate data analysis	3	Lecture, problem solving and
05	Verify and interaction		tutorial
05	Summary on the session		

dispersion values					
Time in Minutes	Topic	BTL	Teaching-Learning Method		
05	Recap				
35	Uni-variate data analysis	3	Lecture, problem solving and		
50	Verify and interaction		tutorial		
05	Summary on the session				

Session 25 : After this session the student will be able to estimate and forecast the trends in time series data					
Time in	Tonio	Teaching-Learning Method			
Minutes	Topic				
05	Recap				
35	Forecasting methods and its components	3	Lecture, problem solving and		
05	Verify and interaction		tutorial		
05	Summary on the session				

Session 26: After this session the student will be able to Forecast the trend by the methods of simple moving for odd period					
Time in	Tonio B'		Teaching-Learning Method		
Minutes	Topic				
05	Recap				
30	Simple moving averages (odd period)	3	Lesture problem solving and		
10	Verify and interaction		Lecture, problem solving and tutorial		
05	Summary on the session				

Session 27: After this session the student will be able to Forecast the trend by the methods of simple moving for odd period					
Time in Minutes	Topic	BTL	Teaching-Learning Method		
05	Recap				
30	Simple moving averages (even period)	3	Lecture, problem solving and		
10	Interaction and verify		tutorial		
05	Summary on the session				

Session 28: After this session the student will be able to Forecast the trend values by single smoothing constant					
Time in Minutes	Topic	BTL	Teaching-Learning Method		
05	Recap				
30	Weighted averages (single smoothing constant)	3	Lecture, problem solving and		
10	Sampling and non-sampling errors		tutorial		
05	Summary on the session				

Session 29: After this session the student will be able to Forecast the trend values by single smoothing constant					
Time in Minutes	Topic	BTL	Teaching-Learning Method		
05	Recap				
30	Weighted averages (double smoothing constant)	3	Lecture, problem solving and		
10	Verify and interaction		tutorial		
05	Summary on the session				

Session 30: After this session the student will be able to understand Forecast the trend analysis for linear data				
Time in Minutes	Topic	BTL	Teaching-Learning Method	
05	Recap			
35	Trend analysis-linear data	3	Lecture, problem solving and	
10	Verify and interaction		tutorial	
05	Summary on the session			

Session 31: After this session the student will be able to outline the principles for good design				
Time in Minutes	Торіс	BTL	Teaching-Learning Method	
05	Recap			
35	Research designs	4	Lastura problem solving and	
	5	4	Lecture, problem solving and tutorial	
05	Verify and interaction		Lutoriai	
05	Summary on the session			

Session 32 : After this session the student will be able to test the significance of several means from homogeneous population In Interpret the conclusions by comparison

Time in Minutes	Торіс	BTL	Teaching-Learning Method
05	Recap		Lecture, problem solving and tutorial
30	Analysis of Variance-one way classification (equal number of observations)	4	
10	Verify and interaction		
05	Summary on the session		

Session 33 : After this session the student will be able to test the significance of several means from homogeneous population in Interpret the conclusions by comparison

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Time in Minutes	Торіс	BTL	Teaching-Learning Method	
05	Recap			
30	Analysis of Variance-one way classification (unequal number of observations)	4	Lecture, problem solving and tutorial	
10	Verify and interaction			
05	Summary on the session			

Session 34: After this session the student will be able to test the significance of several means from homogeneous population Interpret the conclusions by comparison

Time in Minutes	Topic	BTL	Teaching-Learning Method
05	Recap		
35	Completely randomized design (equal number of observations)	4	Lecture, problem solving and
05	Verify and interaction		tutorial
05	Summary on the session		

Session 35: After this session the student will be able to test the significance of several means from homogeneous population in Interpret the conclusions by comparison

Time in Minutes	Topic	BTL	Teaching-Learning Method		
05	Recap				
35	Completely randomized design (unequal number of observations)	4	Lecture, problem solving and		
05	Verify and interaction		tutorial		
05	Summary on the session				

Session 36: After this session the student will be able to test the significance of several means from homogeneous population block wise and treatment wise

Interpret the conclusions by comparison

Time in Minutes	Topic	BTL	Teaching-Learning Method
05	Recap		
35	Randomized block design	4	Lecture, problem solving and
05	Verify and interaction		tutorial
05	Summary on the session		

block wise and treatment wise in Interpret the conclusions by comparison				
Time in	Topic	BTL	Teaching-Learning Method	
Minutes	Topic			
05	Recap			
35	Randomized block design	4	Lecture, problem solving and	
05	Verify and interaction		tutorial	
05	Summary on the session			

Session 38: After this session the student will be able to test the significance of several means from homogeneous population row wise, column and treatment wise in Interpret the conclusions by comparison

	and the detinent tribe in interpret tribe derivations by comparison.		
Time in	Topic	BTL	Teaching-Learning Method
Minutes	Торіс		
05	Recap		
35	Latin square design	4	Lecture, problem solving and
05	Verify and interaction		tutorial
05	Summary on the session		

Session 39: After this session the student will be able totest the significance of several means from homogeneous population row wise, column and treatment wiseInterpret the conclusions by comparison

1011 11130, 0014	Tow wise, column and treatment wiseinterpret the conclusions by companison			
Time in	Topic	BTL	Teaching-Learning Method	
Minutes	Topic			
05	Recap			
35	Latin square design	4	Lecture, problem solving and	
05	Verify and interaction		tutorial	
05	Summary on the session			

Session 40: After this session the student will be able to illustrate the procedure for effective report writing				
Time in	Tauria B		Teaching-Learning Method	
Minutes	Topic			
05	Recap			
30	Report writing	4	Lecture, problem solving and	
10	Verify and interaction		tutorial	
05	Summary on the session			

Session 41: After this session the student will be able to illustrate various types of reports preparation				
Time in	Topic	BTL	Teaching-Learning Method	
Minutes				
05	Recap			
35	Types of report	4	Lecture, problem solving and	
05	Verify and interaction		tutorial	
05	Summary on the session			

Session 42: After this session the student will be able to illustrate the various steps for effective report preparation							
Time in Minutes	Торіс	BTL	Teaching-Learning Method				
05	Recap						
35	Steps in research	4	Lecture, problem solving and				
05	Verify and interaction		tutorial				
05	Summary on the session						

Session 43: After this session the student will be able to understand the steps to be taken for effective presentation of reports							
Time in Minutes	Topic	BTL Teaching-Learning Method					
05	Recap		Lecture, problem solving and				
35	Mechanics of report writing	4	tutorial				

05	Verify and interaction	
05	Summary on the session	

Session 44: After this session the student will be able to identify the precautions to be considered to prepare a final report on research

research							
Time in	Tonic	BTL	Teaching-Learning Method				
Minutes	Topic						
05	Recap						
35	Precautions in report writing	4	Lecture, problem solving and				
05	Verify and interaction		tutorial				
05	Summary on the session						

Session 45 : After this session the student will be able to understand							
Time in Minutes	Торіс	BTL	Teaching-Learning Method				
10	Recap						
30	Precautions in report writing	4	Lecture, problem solving and				
05	Verify and interaction		tutorial				
05	Summary on the session						

# **EVALUATION PLAN:**

Evaluation Component	Weightage/Marks			со і			со п			co III			co ıv		
COI Number		Date	Duration (Hours)	1	2	3	1	2	3	1	2	3	1	2	3
BTL				1	1	1	2	2	2	3	3	3	4	4	4
Test 1	Weightage (10%)		90Minutes	2	4	4									
	Max Marks (20)			4	8	8									
Test 2	Weightage (10%)	90Minutes	90Minutes				2	4	4						
	Max Marks (20)						4	8	8						
Test 3	Weightage (10%)		90Minutes							2	4	4			
	Max Marks (20)									4	8	8			
Tutorial /	Weightage (15%)				4		4			4			3		
Assignments	Max Marks (15)				5			4			3			3	
Attendance	Weightage (5%)														
Semester End Exam	Weightage (50%)		180Minutes	2	4	4	2	4	4	2	4	4	4	4	12
	Max Marks (50)				10		10		10		20				
	Question Number			1	2-7	2-7	1	2-7	2-7	1	2-7	8	1	2-7	8

# **Course Team members, Chamber Consultation Hours and Chamber Venue details:**

S.No.	Name of Faculties	Chamber Consultation Day(s)	Chamber Consultation Timings for each day	Chamber Consultation Room No:	Signature of Course Instructors
1	Dr. Deepa	Tuesday To Saturday	4p.m-5p.m	L511	Dr. Deepa

**Signature of the Vetting Committee Members:** 

**Recommended by HEAD OF DEPARTMENT:** 

Document digitally approved by Vetting Team and HOD. For details please contact Digital Learning Team @C104. Please refer to the document's digital certificate for authenticity.

Hari Kiran Vege, Assoc.Dean-TLP

for Approved By: DEAN-ACADEMICS

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